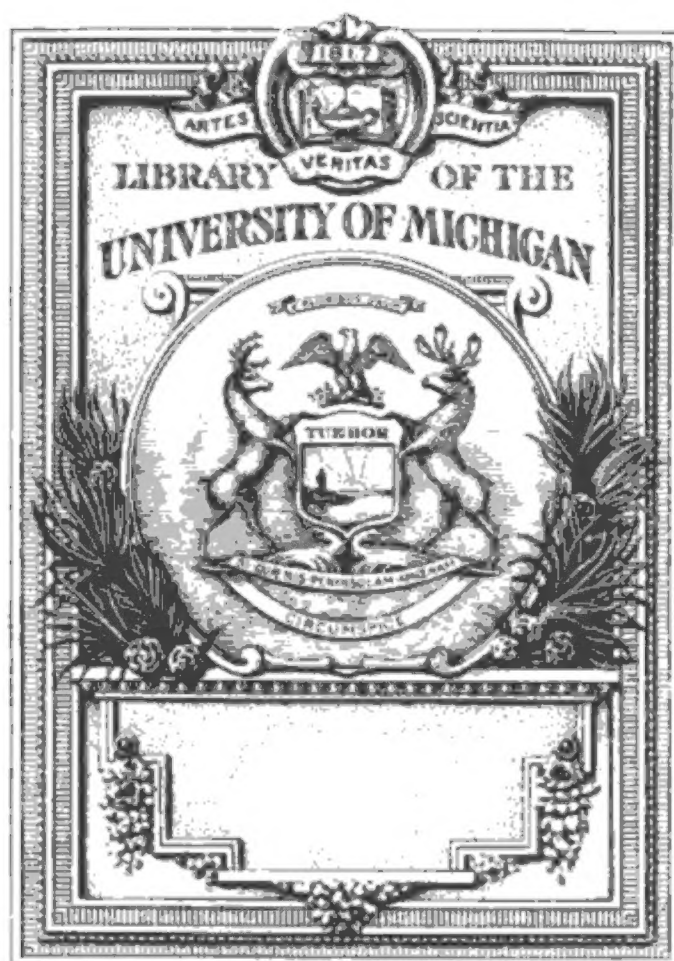


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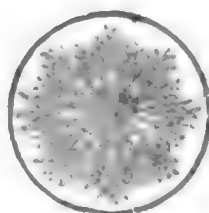
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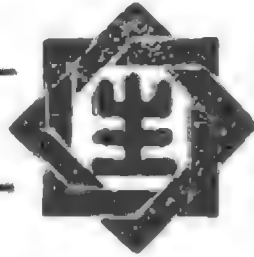
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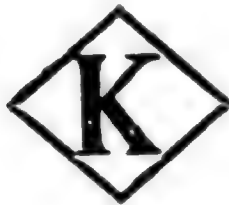
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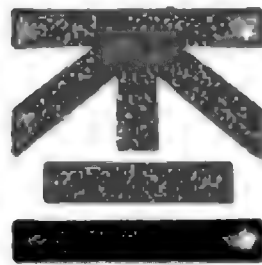
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BY

Y. TAKENOBU

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TWENTY-FIFTH YEAR OF ISSUE



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N.B.—Dr. J. E. de Becker is an Englishman, who understands both spoken and written Japanese.

PREFACE

This being a special edition issued to commemorate the Grand Function at Kyoto the usual appendices including "Who's Who", Business Directory, etc. have been omitted. Apart from that omission, the edition does not differ from the previous 1928 issue in contents and general appearance and includes a special section devoted to the Accession Ceremonies. In view of this fact and other considerations the present edition is labelled "1929, 25th year of issue," and this departure in the time of issue will be followed in future, so that our 1930 edition will appear in the fall of 1929. In other words the Japan Year Book will become an autumn publication instead of, as hitherto, a spring one. Though nominally "the 25th year of issue" it may not be strictly correct to call it the "25th anniversary edition" for which the volume will be completely overhauled. Such thorough revision was judged hardly possible in the limited time at our disposal, and we decided to reserve the laborious task till next year which as reckoned by the calendar is really our 25th anniversary.

The present edition covers six months ending October, but so far as regards the official data given it is just as good as one issued six months later, as most of the Government reports do not appear earlier than April or May. It will be seen that the official statistics quoted in this edition are one year later than those used in our 1928 edition.

To mention some of the noteworthy alterations made, there is first the Chapter on Politics which indeed baffled the best attempt of annalists like ours to be up-to-date, for the party situation in Japanese politics is now so transient and shifting that what was considered as permanent at the moment of reviewing is now found to be out-of-date owing to the secession of the leader of the former Seiyu-honto and part of his followers from the Minseitō with which the party had been merged a few months before. They have resumed their amphibious existence and will probably constitute for some while the centre of disturbance in the political atmosphere. For the rest the results of the first Manhood Suffrage Election are now presented in orderly shape, while the list of Members of the House of Representatives has been rearranged in alphabetical order to facilitate reference. The Tsinan affair and Mr. Kellogg's Anti-war pact proposal have been briefly dealt with in the Chapter

CONTENTS

(REFERENCE TO PAGES)

Preface	I
Diary for 1928 (Mar. to Oct.).....	VIII
Obituary for 1928 (Mar. to Oct.).....	XII
Weights, Measures and Moneys.....	XV
Index to Advertisements.....	XVI
Coronation Chapter	1-32
Chapter I.—Geography	1-15
Position, Area, Territory and Climate, 1—Physical Features, 1—Climate, 6—Fauna and Flora, 12.	
Chapter II.—Outline of Japanese History.....	16-29
Ancient Times, 16—Modern Japan, 21.	
Chapter III.—Earthquakes, Volcanoes and Mineral Springs	30-40
Chapter IV.—Population	41-52
Chapter V.—Imperial Court.....	53-66
Chapter VI.—Politics and Local Government.....	67-112
Constitution, 67—Politics, 74—Revised Election Law, 79—Upper House Reform, 80—The "Genro," 81—Political Parties, 82—Tanaka Ministry, 86—Cabinet Changes since 1885, 87—Imperial Diet, 89—List of Members of the House of Peers, 93—List of Members of the House of Representatives, 97—Local Government, 106.	
Chapter VII.—Civil and Military Service.....	113-125
Classification, 113—Appointment, 113—Scale of Salaries, 113—Pensions and Annuities, 116—The Revised Pension System, 116—Directory, 119.	
Chapter VIII.—Diplomacy	126-166
Prior to the Restoration of 1868, 126—Early Meiji Era (1868-94), 128—The Sino-Japanese War, 130—Intervention of the Three Powers, 132—The Anglo-Japanese Alliance, 133—The Russo-Japanese War, 135—Relation with France, 138—Relation with the United States, 139—Japan and the World War, 141—The Washington Conference, 144—Relations with Soviet Russia, 146—Recent Relations with China, 149—The Tsinan Affair, 151—Supplement to Anglo-Japanese Treaty, 154—Diplomatic and Consular Service, 156.	
Chapter IX.—Army, Navy and Aviation.....	167-203
Introductory Remarks, 167—The Army, 168—The Navy, 180—Aviation, 192.	

Chapter X.—Religion and Religious Works.....	204-218
<u>Administrative Control by the State, 205—</u>	
<u>Shintoism, 206—Buddhism, 208—Christianity,</u>	
<u>211—Christian Independence Movement, 215.</u>	
Chapter XI.—Education	219-250
<u>Introductory Remarks, 219—Primary Educa-</u>	
<u>tion, 222—Secondary Education, 224—Univer-</u>	
<u>sity Education, 227—Technical and Profes-</u>	
<u>sional Education, 232—Public and Private</u>	
<u>Schools of Higher Grade, 234—Training</u>	
<u>Schools for Teachers, 236—Schools under</u>	
<u>Control of other Departments of Govern-</u>	
<u>ment, 238—Societies and Councils, 239—</u>	
<u>Financial Matters relating to Education, 240—</u>	
<u>School Hygiene & Competitive Examination,</u>	
<u>241—Libraries and Museums, 243—Moral</u>	
<u>Education and Physical Culture, 246—Foreign</u>	
<u>Students studying in Japan and Japanese</u>	
<u>Abroad, 248—Sundry Topics, 249.</u>	
Chapter XII.—Labor	251-262
<u>Labor Organizations, 251—Number of Labor-</u>	
<u>ers, 252—Data on Factory Labor, 253—The</u>	
<u>Factory Law, 256—Japan in the International</u>	
<u>Labor Conference, 257—Living Expense of</u>	
<u>Workpeople, 258—Unemployment, 259—</u>	
<u>Housing of Laborers, 260—Recent Labor Dis-</u>	
<u>putes, 260.</u>	
Chapter XIII.—Social Problems and Facts.....	263-273
<u>The Situation, 263—Deliberative Organs, 263—</u>	
<u>Social Bureau and New Laws, 264—Co-oper-</u>	
<u>ative Societies, 265—Mutual Aid Association of</u>	
<u>Workmen, 265—Women Problems, 266—Local</u>	
<u>Young Men's League, 268—Eleemosynary</u>	
<u>Work, 269—State and Communal Relief for</u>	
<u>Paupers, 269—The Communist Affair in Japan,</u>	
<u>271.</u>	
Chapter XIV.—Justice, Prisons and Police.....	274-288
<u>Justice, 274—Prisons and Prisoners, 280—</u>	
<u>Police, 283.</u>	
Chapter XV.—Medicine and Sanitation.....	289-297
Chapter XVI.—Press and Publication.....	298-307
Chapter XVII.—Modern Literature.....	308-317
Chapter XVIII.—Arts and Crafts.....	318-339
<u>Introductory Remarks, 318—The Period of</u>	
<u>Meiji & After, 318—Painters of Note in the</u>	
<u>Meiji Era, 335—Designs, 336—Music, 338.</u>	
Chapter XIX.—Sports	340-355
<u>National Sports, 340—Western Sports Intro-</u>	
<u>duced, 346—Leading Athletic Grounds, 355.</u>	
Chapter XX.—Amusements	356-364
<u>The Stage Art, Dance and Music, 356—Profes-</u>	
<u>sional Story-tellers, 360—Motion Pictures, 360</u>	
<u>—Intellectual Games, Indoor, 361.</u>	

CONTENTS

v

Chapter XXI.—Construction	365-379
Public Works, 365—Roads, 366—Tramways, 367	
—River Works, 367—Harbor Works, 368—	
Sanitary Works, 370—Irrigation and Drainage,	
371—Coast Protection, 371—Technical Aspects	
of the Earthquake Damage to Public Works,	
392—Architecture and Earthquake, 375—Seis-	
mic Value of Different Styles of Buildings, 376	
—Revised Construction Regulation, 379.	
Chapter XXII.—Post, Telegraph & Telephone.....	380-393
Post, 380—Telegraph & Telephone, 381—	
Postal Savings, 384—Statistics, 385—Resume	
of the Rules in Operation, 387.	
Chapter XXIII.—Railways	394-410
The Nationalization Program as worked out,	
394—The New Construction Law, 395—Gene-	
ral Statistics on Railways, 395—The Govern-	
ment Railways, 396—Private Railways, 403—	
Electrification of Railways, 404—International	
Traffic Arrangements, 405—Tramways, 407—	
Automobiles as Auxilliary or Rival, 407—Japan	
Tourist Bureau, 410.	
Chapter XXIV.—Shipping and Shipbuilding.....	411-427
Shipping, 411—Features of Japanese Shipping,	
412—Growth of Vessels, 413—Allocation of	
Japanese Shipping, 415—Freight and Charter	
Market, 420—Navigation, 421—Shipbuilding	
Industry, 423—Shipyards and Docks, 423—Out-	
standing Features in 1927, 425.	
Chapter XXV.—Patents, Designs, Trade-marks and Utility	
Models	428-433
Industrial Property, 428—Patents, 430—	
Utility Models, 430—Designs, 431—Trade-	
marks, 431—Statistics, 432—Encouragement of	
Inventions, 433.	
Chapter XXVI.—Insurance	434-442
Introductory Remarks, 434—Life Insurance,	
434—Property Insurance, 434—Present Condi-	
tion; Japanese Companies, 436—Statistics on	
Insurance, 438—Conscription Insurance, 440—	
Reinsurance Business, 440—Historic Fires in	
Japan, 441—The Fire Ins. Cos. and Earth-	
quake-fire Gratuity Payment, 442—Foreign	
Insurance Companies, 442.	
Chapter XXVII.—Banks and Banking Business.....	443-462
Introductory Remarks, 443—Bank Notes, 445—	
Principal Banks, 446—Special Banks, 446—	
Syndicate Banks, 448—Foreign Exchange	
Business in Japan, 449—Banking Statistics,	
450—Monetary Organs for Poorer Classes, 454	
—Rate of Interest, 455—Bill-Broking Business,	
456—The Trust Business, 457—Clearing	
Houses, 458—Currency System, 459—The Cen-	
tral Bank for Cooperative Societies, 460—	
Foreign Banks in Japan, 461.	

Chapter XXVIII.—Finance	463-487
Introductory Remarks, 463—State Revenue and Expenditure, 464—Statistics on National Wealth, 469—State Monopolies and Undertakings, 469—Taxation, 471—Statistics of Taxation, 477—International Wars and Indemnity, 478—National Debts, 479—Japan's Investment in China, 480—Specie Hoarded Abroad, 481—Finance of Hokkaido, Prefectures & Civic Corporations, 481—Debenture Loans, 485—The Embargo on Gold and Silver, 487.	
Chapter XXIX.—Agriculture	488-511
Introductory Remarks, 488—Reclamation Works, 489—Fundamental Statistics on Tillage Lands, etc., 490—Manures, 493—Staple Farm Products, 494—Stock-breeding, 497—Poultry, 499—Dairy and Meat-preserving, 500—Horticulture, 501—Sericulture, 501—Tea, 510.	
Chapter XXX.—Forestry	512-520
Introductory Remarks, 512—Area of Forests, 513—Important Forests, 514—Adjustment of State Forests, 514—Financial Aspects, 515—Supply and Demand of Timbers, 517—Camphor, 517—Sawing Business and Wood Industry, 518—Inflow of Foreign Timbers, 519—Game Laws, 520—Birds and Beasts of Game, 520.	
Chapter XXXI.—Fishery	521-529
Introductory Remarks, 521—Encouragement of Pelagic Fishery, 522—Fishing Population and Boats, 523—The Economic Position of Fishery, 524—Principal Marine Products, 524—Export of Fish and Marine Products, 524—Aquiculture, 525—Deep Sea Catches, 526—Fur Animals and Fox Farming, 527—Salt Industry, 527—Coral Fishery, 528—Japanese Fishing Abroad, 528.	
Chapter XXXII.—Mines and Mining	530-543
Distribution of Strata, 531—Metal-veins, 531—Mineral Production, 531—Gold, 533—Silver, 534—Copper, 534—Iron, 535—Lead, Bismuth, Zinc, 536—Iron Sulphide, 536—Tin, 536—Principal Metal Mines, 537—Coal, 537—Petroleum, 540—Investment in Mining Business, 542.	
Chapter XXXIII.—Industry	544-583
General Remarks, 544—Factories and Employees, 545—Spinning and Weaving, 546—Electric and Gas Industries, 553—Mechanical Industry, 559—Chemical Industry, 563—Building Industry, 577—Miscellaneous Industries, 579—Minor Manufactures, 582.	
Chapter XXXIV.—Trade	584-604
Recent Trade Situation, 584—Business Promotion in 1928, 587—General Statistics on Economic Corporations, 587—Business Results	

<u>In Recent Years, 588—Chambers of Commerce, 589—Exchanges, 589—Share Market in 1928, 592—Warehousing, 593—Mercantile Agencies, 594—Guilds' of Staple Commodities, 594—Commercial Museums, 595—Prices of Commodities, 595—Movement of Staple Commodities in 1928, 596.</u>	
<u>Chapter XXXV.—Foreign Trade</u>	<u>605-648</u>
Introductory Remarks, 605—Legislative Measures pertaining to Customs Tariff, 606—Tariff Revision in 1926-7, 607—Customs Tariff Law, 608—Conventional Tariff, 620—The "Luxury" Tariff, 623—Export Guilds Law, 625—Movement of Foreign Trade, 626—Summary of Principal Imports and Exports, 628—Staple Articles; Where They Go or Come from, 630—Distribution of Trade, 637—Principal Exports and Imports by Countries, 639—Customs Revenue, 644—Japan's Invisible Trade, 644—Steam-vessels Entered from and Cleared to Foreign Countries, 645—Foreign Trade Situation in 1927-8, 645.	
<u>Chapter XXXVI.—Six Premier Cities.....</u>	<u>649-662</u>
The City Planning Law, 649—Area and Population, 649—Municipal Finances, 650—Municipal Assets and Liabilities, 651—Municipal Budget, 651—Social Works in the Six Municipal Budgets, 651—Housing Question, 653—Tokyo, 654—Osaka, 657—Kyoto, 659—Yokohama, 660—Kobe, 661—Nagoya, 662.	
<u>Chapter XXXVII.—Chosen (Korea)</u>	<u>664-681</u>
<u>Chapter XXXVIII.—Taiwan (Formosa).....</u>	<u>682-693</u>
<u>Chapter XXXIX.—Karafuto (Saghalien)</u>	<u>694-697</u>
<u>Chapter XL.—South Manchuria & the South Sea Islands..</u>	<u>698-706</u>
<u>Chapter XLI.—The Progress of Reconstruction.....</u>	<u>707-714</u>
 <u>Index</u>	 <u>1-13</u>

MAPS

- Map of Volcanoes and Seismic Foci
- Sketch Map of Railway Lines under Construction and Lines Planned
- Map showing Principal Hydro-electric Rivers in Middle Japan
- Plan of Reconstruction (Tokyo)
- Plan of Reconstruction (Yokohama)
- General Map of Japan, Korea & Manchuria

DIARY

(Mar. 1—Oct. 31, 1928)

- Mar.** 1. Serious illness of Princess Sachiko (2nd Imperial daughter) is officially announced.
officially announced.
8. Princess Sachiko passes away.
12. A conference of the Japanese consular officials stationed in the American Pacific states is held at San Francisco.
13. The funeral obsequies of Princess Sachiko takes place at Toshimagaoka mausoleum.
22. The Chinese authorities demand the withdrawal of Japanese residents in North Manchuria.
24. A domestic industrial exhibition opens at Uyeno park in commemoration of the coming Coronation ceremonies.
31. Two French aviators Captain Costes and Lieutenant Lebriz arrive in Tokyo on the way of a round-world-flight.
- Apr.** 5. New Japan-German commercial treaty is formally ratified; diplomatic relation is formally established between Japan and Afghanistan.
8. The two French aviators start from Tachikawa for Hanoi on their return flight to Paris.
10. Finding of the trial of the Communist affair is publicly announced and the Rodo Nomin-to and two other communistic bodies are ordered dissolution; Prince and Princess Yi return home from their visit to Europe.
12. The Government decides to take drastic measures for the suppression of the communistic movements; the movement of the dissolved Rodo-nominto men to organize a new party is suppressed.
19. The Government decides on the despatch of additional troops to Shantung; Mobilization order is issued to the 6th Army division at Kumamoto; the American-Japanese conference concerning the standard of Japanese silk yarns opens at Yokohama; the labour trouble at Noda is settled.
23. The 55th (special) session of the Imperial Diet opens.
28. The Imperial Diet is prologued for 3 days.
- May** 1. The Imperial Diet is prologued for another 3 days.
4. The Imperial Diet re-opens; Home Minister Suzuki is relieved of the post and Premier Tanaka appointed Home Minister as additional duty; a brigade stationed in Kwantung is despatched to Tsinan as reinforcement.

ments; the War Office publishes an official report concerning the Tsinan affair.

6. The 55th session of the Imperial Diet is closed.
9. The Government decides on the despatch of another reinforcement to Shantung; Mobilization order is issued to the 3rd Army Division at Nagoya.
12. The Japanese troops occupies Tsinan; further fighting between Japanese troops and the Southern army of China is stopped by order of the Tokyo Government.
23. Communication Minister Kelsuke Mochizuki is appointed Home Minister and Fusanosuke Kuhara Communication Minister as his successor.
25. Education Minister Rentaro Mizuno is relieved of the post and Kazue Shoda appointed Education Minister as his successor.
26. The reply of the Government to American Secretary of State Mr. Kellogg's Anti-war pact proposal is handed to the American Ambassador in Tokyo.
- June 8. Premier Tanaka is assaulted by a ruffian at Uyeno station but escapes unhurt.
14. The prefectural governors conference opens in Tokyo.
26. The Government decides on gradual withdrawal of the troops despatched to Shantung.
27. The Privy Council passes the Imperial emergency ordinance concerning the revision of the Peace Regulations after heated discussions.
29. The Imperial emergency ordinance for the revision of the Peace Regulations is issued.
- July 5. A grand terrial manoeuvres of the Army air force lasting for 3 days commences in Osaka prefecture; all-Japan farmers union organized by the agrarian organizations of right comes into existence.
9. Revised regulation for the control of important export goods is promulgated and comes into operation.
10. The Cabinet council determines the fundamental policy vis-a-vis Tsinan affair; a portion of the 3rd Army Division troops despatched to Shantung is ordered to return home.
11. American aviator Cott Collier arrives at Tachikawa aerodrome from New York on his machine "New York" on the way of a round-the-world flight.
20. The reply of the Government to the second Anti-war pact proposal of the American Administration is handed to the American Charge d'Affaires; the Chinese government notifies to the Japanese Government its intention to abrogate the existing Japan-China commercial treaty.
21. The Government decides to take a decisive measures for the protection of Japan's rights and interests in Mongolia and Manchuria; the Government's policy toward China is publicly announced in the name of Premier Tanaka.

28. Premier Tanaka, in his capacity as Foreign Minister, rejects the compromising proposal of Chinese Minister Wang concerning the abrogation of the Japan-China treaty.
- Aug. 1. Takejiro Tokonami secedes from the Minseitō party and announces his intention to organize a new political party.
8. The Foreign Office publishes the text of the Japanese Government's reply to China concerning the abrogation of the Japan-China treaty.
9. T. Tokonami and his followers organize a new party named Shinto Club.
11. The Bank of Japan decides to sell on market ¥100 million worth Govt. loan bonds in its possession as a measure to check further fall of the exchange quotations.
14. The Government decides on partial withdrawal of the troops detailed to Shantung; Premier Tanaka, in his capacity as Foreign Minister, explains Japan's position vis-a-vis China to the American, French and Russian Ambassadors in Tokyo.
15. Japan-American exchange quotations slumps below \$45 level, the lowest figure recorded since Mar. 1926.
16. Baron Hayashi returns from his special mission to Manchuria and Peking; Evacuation order is issued to the 6th Army Division detailed to Shantung; 2nd note of the Chinese government concerning the abrogation of the Japan-China treaty is handed to the Foreign Office by the Chinese Minister in Tokyo.
- Sept. 4. Transactions in the Tokyo rice exchange are temporarily suspended on account of bulls' operations during the past few days; Finance Minister Mitsuchi explains on the gold embargo problem at the cabinet council meeting.
5. The Russo-Japanese agreement concerning the exploitation of the Saghalien oil fields is signed in Moscow.
6. Troops of the 6th Army Division despatched to Shantung return home; the first passenger carrying regular aerial service between Osaka and Tokyo and Sendai is inaugurated; the official organization of the Economic Council and the appointment of its members are announced.
8. Severe rain storm is reported from north Chosen.
14. Preliminary trial of the Osaka communist affair is finished and the hearing of the preliminary trial court made public.
18. Preliminary trial of the Japan Communist Party affair is finished; the Japanese champions to the Olympic contests at Amsterdam return home.
25. Special manœuvres of the Army air force is held in Gifu and Aichi prefectures.

28. The wedding of Prince Chichibu and Miss Setsuko Matsudaira is celebrated at the Imperial Sanctuary amidst national rejoicings.
- Oct. 1. The jury system is enforced.
2. The second meeting of the Pacific Rotarian conference commences at Imperial Hotel (Tokyo).
3. The training squadron returns home from an extended cruise to the South Seas.
6. Grand Army manoeuvres under the supervision of the Emperor lasting for a week commences in Morioka prefecture; Franco-Japanese field athletic meet commences at the Meiji Shrine stadium.
8. Grand naval manoeuvres lasting for a week commences on the sea between Ise Bay and Tokyo Bay.
13. International swimming contests on the Tama river begin today.
18. The German plane "Junker" piloted by Baron von Huenefeld and two others arrive in the suburbs of Tokyo from Shanghai.
25. The Oriental Development Co.'s foreign loan amounting to \$19,900,000 is successfully floated in New York.
30. The Emperor receives in audience the Coronation envoys of the Powers at the Imperial Palace.

OBITUARY

(Mar. 1—Oct. 31, 1928)

- Mar.** 5. Katagami, Noburu, Russian scholar, ex-Professor at Waseda University; aged 45.
8. Princess Sachiko Hisa-no-miya, second daughter of the Emperor; aged four months.
8. Matsukawa, Toshitane, General (retired), ex-Supreme Military Councillor, hero of the Russo-Japanese war; aged 70.
19. Iwashita, Seishu, once influential businessman and banker of Osaka, ex-M.P.; aged 72.
21. Salto, Keiji, ex-M.P., veteran politician & leader of the Seiyukai Party; aged 69.
22. Shisa, Sho, Vice-Admiral (retired), formerly Dir. of Paymaster Bureau, Navy Dept., Mem. of House of Peers (Imperial nominee); aged 70.
27. Inagaki, Otohei, Dr. Agr., Emeritus Professor of Tokyo Imperial University (Dept. of Agriculture); aged 66.
29. Ohara, Tsutoh, Lieut.-General (retired), ex-Commander of Fifth Army Division; aged 68.
- Apr.** 11. Tatsuno, Shu-ichiro, Politician, ex-M.P.; aged 65.
16. Motoda, Sakunoshin, B.A., M.A., Ph.D. (Philadelphia), Dir. of Rikkyo Daigaku (St. Paul's College); aged 68.
16. Nakagawa, Kenjiro, ex-Dir. of Tokyo Girls Higher Normal School, Lord-in-Waiting of Kinkai Hall; aged 82.
17. Samejima, Shigeo, General (retired), Baron; aged 80.
18. Miyazaki, Dosaburo, D.C., Emeritus Professor of Tokyo Imperial University; aged 70.
22. Okura, Kihachiro, former Baron, noted businessman and founder of Okura Company, Ltd., & Okura Commercial School; aged 92.
22. Muto, Kinkichi, Politician, Parl. Vice-Minister of Home Affairs; aged 64.
- May** 3. Ishibashi, Wakun, noted painter, Mem. of Hanging Committee of Imperial Fine Art Association and Mem. of Royal Academy (France); aged 53.
4. Matsumura, Jinzo, Dr. Sc., Emeritus Professor of Tokyo Imperial University (Science Department), noted botanist; Dir. of Botanical Gardens of Imp. University; aged 73.

19. Kaino, Kozo, politician, one of Founders of the Seiyukai Party, ex-M.P.; aged 72.
 21. Kyogoku, Takanori, Viscount, Mem. of House of Peers; aged 71.
 21. Noguchi, Hideyo, M.D., Dr. Sc., Professor at the Rockefeller Medical Institute, N.Y., U.S.A.; aged 53.
 26. Kadono, Tominosuke, once influential politician, Pres. of Nagoya Railway Co., Ltd.; aged 70.
 29. Wakao, Ikuzo, noted businessman of Yokohama & veteran politician (Seiyukai Party); aged 72.
- June 5. Shiba, Sukenatsu, former Chief Musician of Imperial Household; aged 71.
23. Mozume, Takami, Dr. Litt., former Professor at Tokyo Imperial University, noted scholar and authority on Japanese classics; aged 80.
- July 16. Kurozumi, Seisho, Parl. Counsellor of Justice Dept.; aged 43.
20. Nannichi, Tsunetaro, Dir. of Toyama High School; aged 58.
 29. Kawada, Keizo, Auditor of Nippon Ginko (Bank of Japan); aged 58.
 29. Itakura, Katsunori, Viscount, Mem. of House of Peers; aged 58.
- Aug. 1. Sakai, Tadasuke, Viscount, Mem. of House of Peers; aged 68.
26. Sato, Denzo, noted geologist, Professor at Tokyo Higher Normal School; aged 59.
 31. Yamazaki, Shinaroku, formerly chief of Imperial Household Treasury; aged 61.
- Sept. 5. Onoye, Matsusuke, veteran actor of old school; aged 86.
27. Hirai, Masanori, Auditor of Nippon Kwangyo Ginko (Hypothec Bank of Japan); aged 60.
 28. Oshima, Hisanao, Viscount, General (retired), hero of Japan-China and Russo-Japanese Wars; aged 81.
 28. Ichimura, Mitsuye, L.L.D., Emeritus Professor of Kyoto Imperial University, ex-Mayor of Kyoto; aged 54.
- Oct. 1. Hiroi, Isamu, Dr. Eng., Emeritus Professor at Tokyo Imperial University; aged 67.
1. Toyama, Chinkichi, Dr. Med., Dir. of Tokyo Micro-Biological Institute, ex-Professor at Tokyo Imperial University (Dept. of Medicine); aged 72.
 5. Kanno, Katsunosuke, Mem. of House of Peers (Imperial nominee), ex-Vice-Minister of Finance; aged 61.

7. Tsuboi, Kuhachiro, Baron, Mem. of House of Peers; aged 53.
18. Isobe, Masaharu, Lord-in-Waiting of the Kinkai Hall, ex-Dir. of Mining Bureau, later businessman; aged 65.
15. Hirotsu, Naondo (Pen-name Ryuro), once popular novelist; aged 68.
20. Nakamura, Yujiro, Lieut.-General (retired), Baron, Privy Councillor, ex-Pres. of Govt. Iron Foundry; aged 77.
24. Nashiwa, Tokioki, Baron, Vice-Admiral (retired), hero of the Japan-China and Russo-Japanese wars; aged 79.

WEIGHTS, MEASURES AND MONEYS

WITH ENGLISH AND FRENCH EQUIVALENTS

DISTANCE AND LENGTH

<i>Ri</i> = 36 <i>cho</i> = 2160 <i>ken</i>	= 2.44030 miles	= 3.92727 kilomètres
<i>Ri</i> = (marine)	= 1 knot	= 1.85318 kilomètres
<i>Ken</i> = 6 <i>shaku</i> = 60 <i>sun</i>	= 5.965163 ft.	= 1.81818 mètres
<i>Shaku</i> = 10 <i>sun</i> = 100 <i>bu</i>	= 0.994194 ft.	= 0.30303 mètres
<i>Shaku</i> (cloth measure)	1.25 <i>shaku</i>	
<i>Tan</i> (cloth measure)	= a roll of about 25 <i>shaku</i>	

LAND MEASURES

Square <i>ri</i> = 1296 <i>cho</i>	= 5.95505 sq. miles	= 15.42347 kilomètres carrés
<i>Cho</i> = 10 <i>tan</i> = 3000 <i>tsubo</i>	= 2.45064 acres	= 99.17355 ares
<i>Tsubo</i> or <i>bu</i>	= 3.95369 sq. yards	= 3.30579 centiares
<i>Ko</i> (Formosa) = 2934 <i>tsubo</i>		

QUANTITY, CAPACITY AND CUBIC MEASURES

<i>Koku</i> = 10 <i>to</i> = 100 <i>sho</i>	= { 4.96005 bushels 47.95389 gallons (Liquid) U.S.A. 5.11902 bushels (Dry) U.S.A. }	= 1.80391 hectolitres
<i>Go</i> (10th of a <i>sho</i>)		
<i>Koku</i> (capacity of vessels)	= 10th of a ton	
<i>Koku</i> (timber)	= about 1 cubic ft. × 10	
<i>Koku</i> (fish)	= 40 <i>kan</i> (in weight)	
<i>Shakujime</i> (timber)	= about 1 cubic ft. × 12	
<i>Tana</i> (fagot, etc.)	= about 3 × 6 × 6 ft.	

WEIGHTS

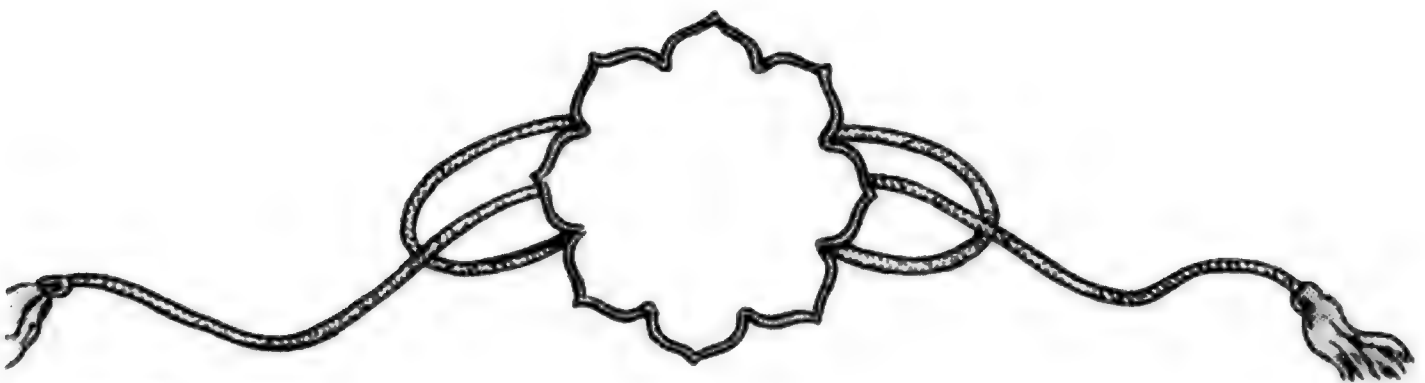
<i>Kwan</i> (<i>Kan</i>) = 1000 <i>momme</i>	= { 8.26733 lbs. (Avoir) 10.04711 lbs. (Troy) }	= 3.75000 kilogrammes
<i>Kin</i> = 160 <i>momme</i>	= { 1.32277 lbs. (Avoir) 1.60754 lbs. (Troy) }	= 0.60000 kilogrammes
<i>Momme</i> = 10 <i>fun</i>	= { 0.13228 oz. (Avoir) 0.12057 oz. (Troy) }	= 3.75000 grammes

MONEYS

<i>Yen</i> (¥) = 100 <i>sen</i> = 1000 <i>rin</i> = 2 ⁸ od. 581	= 2.583 francs
	= 0.4984 dollars (U.S.A.) = 2.0924 marks (Ger.)

INDEX TO ADVERTISEMENTS

Asano Portland Cement Co.....	Facing XXXI
Chosen Government Railways.....	XXIV
Dai-ichi Bank	IX
Dai Nippon Brewery Co.....	XXX
Dai Nippon Sugar Manufacturing Co.....	XV
English Electric Co.....	XXXVII
Fuji Gassed Spinning Co.....	XVIII
Fuji Paper Mills.....	XXIX
Furukawa Electric Co.....	XXVI
Imperial Marine & Fire Insurance Co.....	II
J. E. de Becker Law Office.....	Back Title Page
Japan Advertiser	XXXIII
Japan Chronicle	XXXV
Japan Industrial Bank.....	X
Japan Times	XXXIV
Japanese Government Railways.....	XX, XXI, XXII
Kanematsu Shoten.....	XIX
Katakura Raw Silk Co.....	XVI
Kawasaki-Daihyaku Bank	XI
Kawasaki Sharyo Kaisha.....	XXV
Kenkyusha	XXXII
Kirin Brewery Co.....	V
Kyodo Fire Insurance Co.....	XXXVIII
Mitsubishi Goshi Kaisha.....	III
Mitsui Bank	449-A
Mitsui Trust Co.....	449-B
Mitsukoshi	VI
Monopoly Bureau	470-B
Nichiro Gyogyo Kaisha.....	VII
Nippon Fire Insurance Co.....	Inside Back Cover
Nippon Life Insurance Co.....	XIII
Nippon Oil Co.....	XXXI
Nippon Yusen Kaisha.....	IV
Nisshin Flour Mills.....	XIV
Nisshin Kisen Kaisha.....	XXXVI
Oji Paper Mills.....	XXVIII
Oolong Tea	470-A
Shinyei Kaito Kaisha.....	XVII
South Manchuria Railway Co.....	XXIII
Toho Electric Power Co.....	XXVII
Tokyo Fire Insurance Co.....	I
Yamachi Securities & Finance Co.....	XL
Yasuda Bank	Inside Front Cover
Yasuda Trust Co.....	VIII
Yokohama Fire & Marine Insurance Co.....	XXXIX
Yokohama Specie Bank.....	XII



The Coronation Programme

November 6—At 7.15 a.m. Their Imperial Majesties leave the Imperial Palace; at 8 a.m. the Imperial railway train starts from Tokyo Station.

November 7—Their Majesties arrive at Kyoto Station at 2 p.m.

November 10—Rites and ceremonies in front of the Imperial Sanctuary, from 8.20 to about 11 a.m.

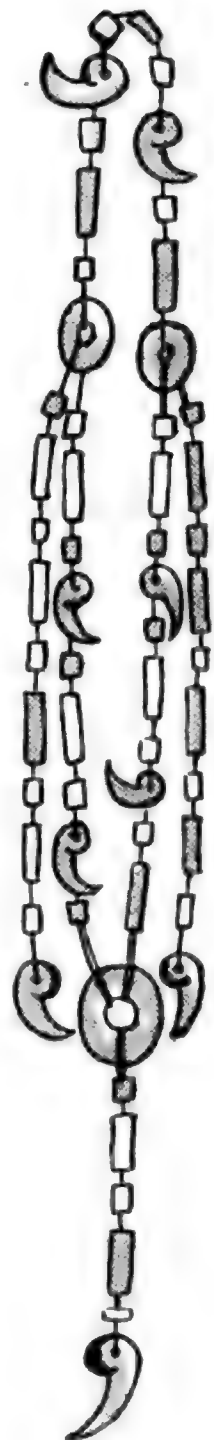
November 10—Rites and ceremonies at the Shishin-den, from 1.50 to about 3.30 p.m.; "Banzai" by Prime Minister at about 3 p.m.

November 14-15—Rites and ceremonies of Daijohsai; at the Yukiden pavilion from 6 to 11 p.m., and at the Sukiden from 1 a.m. to about 4 a.m. of the 15th.

November 16—First State banquet from 11.30 a.m. to 2.30 p.m.

November 17—The second banquet from 6 p.m. to 7.30 p.m.; the evening function from 8 p.m. to past midnight.

November 20 to 29—The Emperor visits the Grand Shrines of Ise and mausolea of the first and the last four Emperors. Their Majesties returning to Tokyo on 27th, at 3.30 p.m.



The Coronation Ceremonies at Kyoto

Properly to understand the meaning and origin of all the rites and ceremonies in connection with the Coronation to be solemnized at the ancient city of Kyoto in November we must imagine ourselves transported to the mythical age when Japan was inhabited by the "Milliards of Deities." The Coronation rites and ceremonies are on the whole in strict accordance with the time-honored legends and hoary traditions, jealously handed down from ancient time, and of course preclude discussion in terms of cold modern science, all those sacred formalities being derived from the ancient cult of ancestor-worship. This cult ordains that when a new Emperor succeeds to the Throne he should perform a proper service to inform the spirits of his Imperial ancestors of the solemn fact and thereby invoke their protection. The reason for this is that the cult of ancestor-worship is essentially based on the primitive ideas, which before the advent of more advanced religious faith ruled the mind of all peoples who implicitly believed that the spirits of their ancestors watched over the destiny of their descendants and that therefore they should be communicated with on every important occasion of felicity or disaster. This simple notion of ancestor-worship was submerged under the pompous and cumbrous forms of Chinese Court ceremonies when in the reign of Tenchi Tenno, 668-671 A.D., Japan introduced the Chinese style of ceremonies of the Sui and Tang dynasties.

Revival of the Ancient Court Formalities

The imported manners and customs were long accepted as a model by the Imperial Court till by order of Meiji Tenno, 1868-1912, they were considerably modified to make them more adapted to the ancient traditions of Japan and especially to the cult of ancestor-worship which, it should be stated, has developed into a form of native religious belief known as Shinto. The revival of the indigenous Court formalities is nowhere more conspicuous than in the Daijo-sai, or the Grand Thanksgiving

ceremonies which form part of the solemn Coronation service, their origin being traced by antiquarians and ritualists to the first Emperor Jimmu himself.

The Sacred Treasures—Emblem of Sovereignty

The term "Coronation" is, strictly speaking, out of place in Japan, for the simple reason that Japan has no Crown as emblem of sovereignty. In Japan the emblem consists of three Sacred Treasures, namely, the Yata-no-Kagami, or Sacred Mirror, the Amenomurakumo-no-Tsurugi, or Sword of Heavenly Cloud, and the Yasakani-no-Magatama, or Eight-feet Jewel-Bead Necklace. We are told that these Imperial Insignia were bestowed by the Great Sun-Goddess, Amaterasu Omikami, the first ancestress of the Imperial Family of Japan, upon an Imperial Grandson when he was dispatched from the Heavenly High Plain to rule the land of Japan. The acquisition of the Sacred Treasures has in Japan the same significance as the ceremony of crowning in the West, as is distinctly set forth in Art. X of the Imperial House Law, which reads:—

"Upon the demise of the Emperor, the Imperial heir shall ascend the Throne and shall acquire the Divine Treasures of the Imperial Ancestors."

As may be surmised from what has been stated above, the origin of the Divine Treasures is beyond the conception of ordinary mortals, much less a subject of modern scientific investigation, but as objects of such paramount importance to the sovereignty of Japan it is fitting to describe them here briefly.

The Sword is associated with the interesting story of Susanoo-no-Mikoto, the impetuous brother of Amaterasu, who, when he slew the ferocious Dragon with Eight Heads and Eight Tails, found in one of the tails a wonderful sword which he presented to Amaterasu. No such legend is attached to the two other Imperial Heirlooms, the Mirror and the Jewel; in fact their origin is unknown. However the Sun-Goddess seems to have placed special importance on the Mirror, as she is said to have conferred the Three Treasures on the grandchild with these words:—

"Regard this mirror as my soul, and neglect not to worship it, and make obeisance before it, as to my own person. Then shall the duration of the Imperial Throne be as eternal as Heaven and Earth."

The Treasures are understood to be symbolical, the Mirror standing for righteousness and straightforwardness, the Jewel for the virtues of gentleness and benevolence, and the Sword for valor and sagacity, and the Imperial possessor of the Treasures is therefore naturally presumed to be endowed with those kingly qualities.

The Treasures are not all kept in the Imperial Court, but only the Jewel with replicas of the other two. The Mirror is enshrined at the Great Shrine of Ise and the Sword at the Atsuta Shrine, Nagoya, from a legend relating to Prince Yamato-todake who was allowed to carry it with him when he proceeded to eastern Japan to subjugate a rebellion. The Jewel and replicas are kept in the Imperial Sanctuary known as Kashikodokoro in the Palace. Such are in the main the introductory remarks deemed necessary for the proper understanding of the rites and observances that make up the Grand Ceremony of Coronation in November. It is those rites and observances that are of direct interest to the public, as will be described below.

The Preparatory Ceremonies

Fixing the Auspicious Date

The first procedure in the elaborate formalities that constitute the Coronation Ceremonies consists in deciding upon the date for Enthronement, the date to be announced to the mausolea of the first Emperor Jimmu Tenno and of the immediate predecessors of the reigning Emperor. The announcement is made by reading a scroll handed by the Emperor to the messenger. A similar formality is observed before all the principal Imperial shrines in the country. This first preliminary rite is performed in the middle of January.

The Selection of Rice-Plots: "Yuki" and "Suki" fields

The date thus fixed upon, the next step in the grand Imperial function is to select the rice-plots for raising the rice to

be used in the Great Thanksgiving ceremony called Daijo-sai which, together with the Enthronement ceremony performed before the Imperial Sanctuary in the Shishinden Hall, constitute the main feature of the Coronation Ceremonies. The growing of rice for use at the Daijo-sai is of such importance that three articles in the Imperial Accession Law given elsewhere are devoted to determine the selection of plots and so forth. As specified in the articles two fields are selected by the Emperor, one in the district to the east and south of Kyoto and the other in the district to the west and north of Kyoto, the fields which are selected after an elaborate process of divination, being called respectively "Yuki" and "Suki". On March 15 it was announced that the honor of providing the "Yuki" field had fallen on Shunji Kumegawa at Mikami village, Yasu county, Shiga prefecture, and the "Suki" on Shi-ichiro Ishizu, a farmer at Wakiyama village, Hayara county, Fukuoka prefecture. The cultivation of the precious rice plants on the chosen plots is being attended to with all the elaborate rite of purification required by the ancient cult of Shinto.

● The Ceremonies in the Palace before the Imperial Departure

Early on the morning of the day of the departure of Their Majesties to Kyoto the Emperor performs in person a solemn ceremony in front of the Imperial Sanctuary containing the Sacred Mirror, which is then transferred to a special palanquin for conveyance to Kyoto with Their Majesties. The other two Treasures, the Sword and Jewel, are carried by the Grand Chamberlain, as is invariably the case in all Imperial processions. The palanquin is borne at Tokyo and Kyoto by 16 "boys", with so many reserves, from Yase, a suburb of Kyoto, the Yase "Boys" enjoying this privilege from time immemorial. They are attired in quaint ancient costume. The palanquin is heralded by mounted police-sergeants in regulation uniform and is also flanked by uniformed military officers. The whole spectacle is rich in contrast. Then follow the principal officials of the Grand Ceremonies and of the Imperial Household in carriages at a respectful distance from the State carriage, built in Louis-

XIV style, in which sits the Emperor in the uniform of a Field-Marshal and accompanied by the Grand Chamberlain. The carriage is drawn by eight horses. The Empress' carriage which comes next is drawn by four horses. Then follow in carriages or mounted Prince and Princess Chichibu, other Princes and Princesses of the Blood, Aides de Camp, the Prime Minister and Ministers of State, and other important dignitaries civil and military, the whole procession extending over 600 meters. Arrived in Kyoto the Sanctuary containing the Mirror is placed in the Shunkoden Hall that stands east of the Shishinden.

The Coronation Ceremonies

The Coronation ceremonies, it should be noted here, were specified in the Accession Law elaborated by order of Meiji Tenno and proclaimed on February 11, 1909. Some important innovations were introduced in it with the idea of, so to speak, Japonicising the Coronation Ceremonies that had been modelled in ancient time too much on the Chinese Court etiquette of the Tang Dynasty.

The Empress in the Coronation Ceremonies

One of the most interesting changes in this respect is the formal recognition of the position of an Empress and her privilege to share the honor with her Imperial husband of attending the Grand ceremonies. This is of special importance in that no such precedent is known in the whole history of Japan, for formerly the status of a consort of an Emperor was not, in accordance with the usual social custom obtaining in those days, properly recognized, but was placed on a lower level. With the accession of the late Emperor Taisho the Law would have come into operation, but at the time of his Enthronement ceremonies in November 1915 the Empress was enceinte and the Throne for Her Majesty was merely placed as a matter of form by the side of that for the Emperor. It remained unoccupied during the whole period of the ceremonies.

The Ceremony in front of the Kashikodokoro

The ceremony performed in front of the Kashikodokoro is

religious, its object being to inform the Sun-Goddess and the spirits of other Imperial ancestors of the accession to the Throne of the new Emperor before informing the people at large. This change in the ancient custom is said to have been made at the instance of Meiji Tenno. The privilege of witnessing the rite, is extended to a large number of distinguished military and civil officers as well as their wives and also the foreign envoys and wives for whose accommodation pavilions have been erected in the courtyard between the Shunko-den Hall, where the ceremony is held, and the gates.

Early on the morning of the day the Shunko-den receives the finishing touch of decoration, special 3 ft. sq. thick mats being placed then in the middle of the central chamber for the Emperor and Empress. The opening of the Kenrei and Kenshun Gates is a signal for the privileged Japanese and foreign personages to enter and assemble in the pavilions erected for their accommodation. Next the Princes and Princesses of the Blood enter the Giyo-den on the east of the Shishinden and west of the Shunko-den and soon after Their Majesties, attended by Chamberlains and Maids of Honor, enter the same Hall. There the Emperor and Empress, Princes and Princesses of the Blood, as also all the distinguished functionaries and maids of honor put on the ceremonial costume. Exactly at the specified time officials of the Coronation Ceremony, attired in the ancient costume of Palace Guards, take their stand at the assigned posts, some of them being armed with ornamented swords, bows and arrows and others bearing shields and halberds. Court musicians too take up their post. There will be other Ritualists and high Coronation officials in ceremonious costume. When the musicians sound the drums and bells three times all the persons present are to stand up and, guided by Coronation officials, all those in the waiting pavilions are to proceed to the allotted place. The screens of the Hall will be rolled up, the sacred music being performed all the while. Then the offerings will be made before the Sanctuary, while the sacred music is played. Next the Chief Ritualist steps forward and reads a prayer. This concluded, the Emperor attended by the Grand Master of Ceremonies, the Minister of the Household, Chamberlains, and other important functionaries, and the Empress with

a retinue of Princesses and others appear and are led to the seats prepared for them. Next the Emperor reads a prayer before the Sanctuary while the Empress makes obeisance to it. The Princes and Princesses of the Blood also make obeisance. Their Majesties then withdraw; the screens are rolled down and the ceremony is closed amidst the performance of music. The drums and bells are sounded three times as before to signify that all the persons present are to leave the place.

The Ceremony at the Shishinden

The Ceremony at the Shishinden to be held in the afternoon is the chief of all the ceremonies of the Coronation, its object being the formal announcement by the Emperor from the elevated throne called the Takamikura to his subjects and all the world that he has assumed the supreme position of ruler of the Empire.

A.—Equipment of the Hall

The Shishinden is the main hall in the Imperial Palace in Kyoto. Built of plain wood in pure Japanese style, with a roof made of the bark of the Japanese cypress, it measures one hundred and ten feet from west to east, and seventy-five feet from north to south. The main gate is called the Kenreimon, and another gate the Shomeimon. It has twelve pillars on the west-east side, and five on the north-south side. At the front it has 18 steps and on the eastern and western sides nine each. On the northern side it is connected with the other Halls by means of a corridor and leads to the Nantei or South Yard. At the left of the front steps grows a cherry tree called the Sakon-no-Sakura, and at the right a mandarin orange called the Ukon-no-Tachibana. Under the front eaves above the steps is suspended a curtain, 91.7 ft. by 5.2 ft. of figured brocade called the "Moko", the design of five-coloured clouds to signify that the Sun is just appearing. On the northern side the Hall is usually closed by pictured sliding screens called Kenjo-no-Shoji, or the Screens of Sages, but on this occasion these screens are replaced by silk curtains of red, blue and yellow.

The Thrones for the Emperor and Empress

In the centre of the Hall stands the Takamikura for the Emperor, and the Michodai for the Empress. The Takamikura looks like a sacred Shinto car carried about on the occasion of a festival, only it is more magnificent. It is placed on a pedestal which is lacquered black and is octagonal in shape, measuring twenty feet from west to east and eighteen from north to south, with a height of three and a half inches. The pedestal has staircases on north, east and west, the northern one with five steps being reserved for the use of the Emperor. The other two have each three steps and also red lacquered rails at the top and on both sides. On this pedestal are placed a second and a third octagonal pedestal and on them stands an octagonal structure which is the Emperor's Takamikura with the roof crowned by a golden phoenix holding a chain link of jewels in its beak. At each of the eight corners of the roof is a small phoenix. The floor of the Throne is matted and carpeted with brocade, and the Emperor's chair is lacquered black and inlaid with nacre. It is flanked with a black lacquered stand on which are placed the Sword and Jewel.

The Michodai for the Empress resembles the Takamikura, only it is a little smaller.

B.—The Courtyard

The Nantei, or South Courtyard is spread with white sand and is surrounded by red lacquered corridors with tiled roofs. The corridors have gates all of which are guarded by officers in ancient costumes. On the side of the Sakon-no-Sakura longitudinal banners, large and small, with designs based on ancient traditions and in diverse colours are planted. Officials in ceremonial costume stand in rows on both the Sakura and Tachibana sides, some of these holding swords, bows, arrows, halberds and shields, and others drums and bells with which to give signals.

In front of each row of banners and nearer the Shishinden is planted a "Banzai" Banner displaying the Chinese characters reading "Banzai" with an ancient design embroidered above the characters. When the Prime Minister gives three cries of Banzai

to acclaim the august function he does so at an assigned spot midway between the two Banzai Banners.

The Ceremonies

The sounding of bells and drums in the courtyard three times announces that the time for the ceremonies has arrived. All the officials take their places, the Grand Master of Ceremonies, the Prime Minister, and the Imperial Household Minister at the west end of the south corridor in the Hall, the Princes of the Blood in front of the Takamikura, and the Foreign Ambassadors and Ministers in the main hall west of the Takamikura. The lady guests stand at the other end of the hall east of the Michodai. Then a Master of Ceremonies utters a low hush to announce the approach of the Emperor. His Majesty ascends the Takamikura by the northern stairs and takes his seat. The chamberlains place the Sacred Sword and the Jewel on the stands in the Takamikura, and then present His Majesty with a sceptre. The Lord Keeper of the Privy Seal alone ascends the Takamikura and proceeds as far as the northeast corner outside the hanging. The Grand Chamberlain and the Chief Aide stand by the steps behind the Takamikura.

Next the Empress ascends the Michodai with the Princesses of the Blood and the court ladies. Then the two chamberlains ascend the Takamikura by different stairs and lift the hangings to the right and left. Two court ladies do likewise at the Michodai of the Empress. The Emperor then stands up holding the sceptre in both hands and the Empress also stands with a wooden fan in hand. All the attendants make profound bows. This is the most dramatic moment in the whole ceremony. Their Majesties are robed in magnificent costume as on the occasion of the Ceremony conducted in front of the Imperial Sanctuary.

The Coronation Banzai

When the Emperor resumes his seat, the Prime Minister descends the western stairs and walks as far as the yard below the front stairs. Then the Emperor stands again and reads an Imperial Rescript. The Prime Minister once more ascends the

front stairs and reads an address of congratulation to the Emperor as the representative of the nation. This finished, he descends the stairs, and walks as far as the Banzai Banners, there to give three cries of Banzai, in which he is joined by all attendants. When the Prime Minister returns to his place by the western stairs, Their Majesties retire amidst the reverberation of the felicitous cries. The bells and drums are sounded three times and all the attendants retire from the sacred precincts. The ceremonies are over.

The Daijo-sai

The Daijo-sai performed on the 14th-15th is the most religious and mystic of all the Coronation observances, and in principle it is essentially identical with the Niiname-sai, or a Harvest Thanksgiving holiday that falls every year on November 23rd and is celebrated always in person by the Emperor. The Daijo-sai is the most elaborate form of Niiname-sai and occurs only once in the life-time of the Emperor and as one of the most important events of the Coronation scheme. This solemn service is held at the temporarily erected structure called Daijokyu and consisting of two sanctuaries, Yuki-den and Suki-den. The simplicity of the structure and utensils used is impressive. The timbers for the two sacred pavilions are not planed, the bark is left on the pillars, while the roofs are thatched with reeds. Coarse matting covers the walls and ceilings and also the floors. The utensils used are of primitive simplicity, the earthenware is unglazed and there are even small trays made of oak leaves. The sacred offerings made to the Gods and spirits of Imperial ancestors consist of rice, saké, millet, vegetables, sea-weeds, etc., but principally the first two which come from the Yuki and Suki fields. Formerly the rice arrived from the honoured fields with stalk and root on and was pounded at a special kitchen erected in the precincts, but nowadays the grain is cleaned at the seat of its origin where the "White" and "Black" saké is also brewed. The fire for cooking the rice in the kitchen is to be kindled in the primitive fashion, that is by a wood-drill. This is also the case with the sacred light offered to the sanctum in the Pavillions.

The Ceremony of Purification

Besides being a ceremony of thanksgiving for a good rice harvest the Daijo-sai also requires of the Emperor and all others the most solemn rite of purification according to the Shinto cult. As Hearn writes "the most important of all Shinto ceremonies is the ceremony of purification. From the earliest period Shinto exacted scrupulous cleanliness, indeed we must say that it regarded physical impurity as identical with moral impurity, and intolerable to the Gods. It has always been, and still remains, a religion of ablutions. This was the case also, it will be remembered, in the early Greek and Roman civilizations:" For the ablutions of the Emperor a special bathing pavilion called Kairyuden has been erected in front of a northern gate. Prior to the Daijo-sai His Majesty goes several times through the purification rite both of food and body.

The Emperor's Vigil at the Yuki and Suki Pavilions

The sacred service required of the Emperor in this religious ceremony is of the most exacting kind. It is even awe-inspiring. At 7 p.m. of the 14th, preceded by the Grand Master of Ceremonies and the Minister of the Household the Emperor enters the Yuki Pavilion followed by a distinguished retinue consisting of the Grand Chamberlain, Princes of the Blood, Ministers of State and other dignitaries. Next the Empress enters the Pavillion with her retinue, and on her Majesty's taking her seat a band of Court musicians strikes up ancient music. This finished, the Empress makes obeisance to the Sanctuary, the Princesses of the Blood and others in the retinue doing the same. When Her Majesty and retinue return to the Kairyuden, the preparations to make the sacred offerings begin. At the signal given by a ritualist the band again strikes up the divine music, and during its performance His Majesty, after first washing his hands, proceeds to the inner partition bearing the sacred offerings of cooked rice and saké laid previously on the 8-legged stand. He now stands alone before the Great Presence, the spirits of the Sun-Goddess and other Imperial Ancestors, makes obeisance and reads a prayer, and himself partakes of the same rice and saké. This finished, the offerings are removed by

ritualists and maids of honour, and the Emperor retires to the Kairyuden after having washed his hands once more. The ceremony at the Yuki-den is now closed.

All the elaborate formalities observed at the Yuki-den are repeated in every detail at the Suki-den where the Emperor's vigil lasts another four hours, altogether eight hours and extending till the small hours of the 15th. The meaning of this repetition of one and same rites and ceremonies at two different places is not clear, except that the repetition is in strict accordance with the venerable traditions. One chronicler hazards an explanation that the duplication is probably traceable to the two-meal custom that was in vogue in ancient days.

The Grand Banquet

In the official program of the Coronation ceremonies the Grand Banquet is the last of all the solemn functions held in the ancient Imperial city. The Banquet will be given for two days and one evening in a great banquet hall temporarily built in the Courtyard, east of the Kyoto Palace. It is a spacious building with a music platform in the centre. The Hall is built in the Momoyama style of three centuries ago and has a coffer-dam ceiling, each section decorated with figures of birds, flowers, etc. The music platform itself is in the Heiancho style of a thousand years ago. It has no ceiling. The Emperor's seat is at the north of the Hall facing south, and that of the Empress is at the east. The Sacred Sword and the Jewel are placed on a table set in front of the Emperor.

The First Day Banquet

This banquet commences on the sixteenth at 11 a.m. The Emperor attends it in the military uniform of Generalissimo, and the Empress dressed in a robe décolleté. The function begins with the Emperor's address expressing his satisfaction at the presence of the representatives of the Powers and his subjects at the felicitous event, and stating that he is glad to drink the health of the chiefs of the friendly nations. The Prime Minister responds to the Imperial Address on behalf of all Japanese subjects, while Dr. Solf, the German Ambassador, as

doyen of the foreign representatives, reads his answer which is interpreted by the Grand Master of Ceremonies. The formality over, the Chamberlain presents to Their Majesties the White and Black saké as offered to the Gods on the occasion of the Festival, the same liquor being given to all those present. The food is next served, in boxes of plain wood after an ancient Japanese style first to Their Majesties and then to all the rest.

The Sacred Dances

Meanwhile, to add to the enjoyment of the occasion, four dancers robed in red costumes appear on the stage and unsheathing swords dance to old music. The dance which is called Kume-mai is said to date from the time of the First Emperor Jimmu. This is followed by two other preliminary dances. Then comes the most interesting dancing of all, the Gosechi-no-mai by five girl dancers selected from among the old noble families in Kyoto. They are robed in red and blue costumes of ancient pattern, and on their heads there are branches of golden plum blossoms while they carry in their hands beautifully painted fans. As souvenir of the day silver plum blossoms and bamboos called On-Kazashi are presented to Their Majesties and to all those present at the Banquet. The pretty ornament comes from ancient custom. The Banquet comes to a close about two p.m.

The Second Day Banquet

The second day Banquet held at the same place on the 17th in the evening is entirely Western. The music played is Western, and the privileged guests numbering about one hundred are given each a silver cake box. The Banquet closes at about eight p.m.

The Night Banquet

The Banquet begins at 8 p.m. when about three hundred persons are invited. At about nine o'clock Their Majesties attend. The first two dances are Chinese, one called Banzairaku by six dancers who are dressed in red clothes of thin silk, the other called Taiheiraku by four dancers attired like warriors. They

dance with unsheathed swords and halberds. When the dance is over Their Majesties retire, followed by all those present. Then comes a big banquet also attended by Their Majesties. The dinner served and the music played are both Occidental. The function ends after midnight.

The august ceremony of Coronation is closed with the visit of Their Majesties to the Great Shrine at Ise, on the 19th, followed on the 23rd by that to the Mausoleum of the First Emperor Jimmu at Unebi in the province of Yamato; on the 24th and 25th to those of the Emperors Ninko and Komel at Idzumiyama in Kyoto, and of the Emperor Meiji at Momoyama, Fushimi.

The Imperial procession returns to Tokyo on the 27th after staying overnight at Nagoya. On the 29th Their Majesties visit the Mausoleum of the Emperor Taisho at Tama, and on the 30th they personally attend rites at the Korei-den and Shin-den in the Palace and the grand ceremonies of the Coronation come to an end as scheduled.

The Reigning Emperor and Empress

The reigning Emperor Hirohito, the first son of the Emperor Taisho and Empress Sadako, then Crown Prince and Crown Princess, was born at the Aoyama Palace on April 29, 1901, and all present were filled with joy when they welcomed a direct successor to the Imperial house to continue its 2,500 years' rule of the Island Empire. On the fifth day after his birth the Prince was named Hirohito Michi-no-miya, and on July 7 of the same year he left his father's Palace and entered the family of a peer, Count Sumiyoshi Kawamura, a retired Admiral, who was selected to bring up the child in his home with his wife Countess Kawamura. This old couple and their daughter (later Countess Yanagiwara) and a few selected nurses took charge of the infant Prince and reared him until the autumn of 1905 when he was full three years old. During his early years the Prince was not of robust health, and his guardians experienced some difficulties in rearing him. During the period in which the Prince lived with him the old Count was instructed to follow plain and frugal methods in rearing the child, who was from the beginning entrusted to his care as an ordinary child stripped of his Imperial heritage. In the autumn of his fourth year the young Prince was taken back to the Palace and from this time he was accorded his princely due and a suite was selected.

In April, 1908, the Prince who was just seven years old entered the primary course of the Gakushu-in (Peers School). On July 30, 1911, when he was in his eleventh year his grandfather Emperor Meiji died, and soon after his father had ascended the Throne as the successor to the illustrious Meiji Tenno the Prince was appointed Sub-Lieutenant of the Army and Junior Sub-Lieutenant of the Navy on September 9, the same year, and was at the same time presented with the Grand Order of Merit. In April, 1914, the Prince graduated from the primary course of the Peers School, and henceforth he ceased to attend school, taking his lessons from specially appointed instructors at the Palace. On the occasion of the celebration of the Imperial

birthday on October 31, 1914, the Prince was promoted to Full Lieutenant of the Army and Senior Sub-Lieutenant of the Navy, being further promoted to Captain of the Army and Lieutenant of the Navy on October 31, 1916. On November 3, same year, he was proclaimed Crown Prince. Soon after his attaining his majority, an event which was celebrated with appropriate ceremonies in May 1919, the Prince was betrothed to Princess Nagako, eldest daughter of H.I.H. General Prince Kuniyoshi Kuni, the engagement being officially announced in June of the same year. On October 31, the following year, he was promoted to Major of the Army and Lieut.-Commander of the Navy, and on March 3, 1921, the Prince sailed for Europe as the first Prince Imperial of Japan to step outside Japanese territory and visit foreign lands. After making observations and exchanging courtesies with sovereigns and rulers of various European countries during his tour of nearly six months the Prince returned home in September of the same year. His memorable tour to Europe was an unqualified success in every respect. In November 1921 the Prince was appointed Prince Regent to undertake the conduct of State affairs in place of his Emperor-father, who was suffering from cronic disease and incapacitated from attending to public duties. From that time on the Prince had to shoulder very weighty responsibilities in his new capacity and practically functioned as a ruler though nominally only a regent. In addition to his anxiety over the health of his father, he had to repair to the Imperial Palace every day except on Sundays to listen to the reports submitted by the Ministers of State and other high officials, to give orders, to attend occasional conferences of the Cabinet Council or Privy Council on important affairs of State, to receive in audience Ambassadors and Ministers of foreign Powers, and so on, all through a very eventful period. On October 31, 1923, he was appointed Lieut.-Colonel of the Army and Commander of the Navy, and on January 26, the following year, the Prince married his bride-elect Princess Nagako, the nuptials which were to have been celebrated at an earlier date having been postponed for some time on account of the great earthquake disaster that occurred on September 1, 1923, and destroyed the greater part of Tokyo and all Yokohama. On October 31, 1925, the Prince was pro-

moted to Colonel of the Army and Captain of the Navy, and on the 25th of December, 1926, lost his father the Emperor Taisho who passed away on that day at Hayama after a protracted illness. The same day, amid the public mourning, the Prince ascended the Throne as the 124th sovereign of the Empire, and the name of the era was changed to Showa, according to the traditional custom.

Endowed by Nature with more than ordinary gifts, the present Emperor had had special opportunities of fitting himself for the arduous position he was called upon to fill, opportunities of which he has availed himself to the uttermost. His extended European tour in 1921 brought him in touch with many phases of Western life and civilization which he would never have encountered if he had remained in Japan, which experience should be of infinite value to him in all matters connected with Japan's foreign policy. His desire to know more of how his people live and under what conditions led to his trip in his earlier days to Formosa, and to many journeys about the country and over Tokyo, all of which have added largely to his actual working knowledge of the lives and surroundings of the people over whom he was destined to rule. After the terrible earthquake disaster of September 1, 1923, the then Prince Regent rode round the devastated districts for several days successively, asking questions, making suggestions, and displaying the keenest interest in the welfare of the sufferers and victims. The sight of their young Prince going among them through all the ruin and desolation wrought by angry nature must have been a cheering spectacle to the over-wrought hearts of the stricken citizens and given them fresh courage to renew the fights.

The Empress

The Empress, formerly Princess Nagako Kuni, eldest daughter of T.I.H. Prince and Princess Kuniyoshi Kuni, was born on March 6, 1903, in Prince Kuni's house at Torizaka in Azabu, Tokyo. At the age of four, she entered the kindergarten of the Peeresses School, and matriculated at the primary course in April, 1911. After finishing this course she continued her studies at the higher course of the school till she graduated in

February, 1918, and thereafter took her lessons from specially appointed instructors at home. In 1922 the Princess was chosen to be the bride of the then Prince Regent and present Emperor, her engagement being officially announced on June 10 the same year. On September 28 that year she received the first Order of Merit from the Imperial Court and on the same day the betrothal presents were exchanged between the Prince Regent and the Princess. The wedding was celebrated on January 26, 1924, and the former Princess Nagako was proclaimed Crown Princess. On the Crown Prince ascending the Throne on December 25, 1926, as new Emperor on the demise of Taisho Tenno she was proclaimed Empress. On December 6, 1925, she gave birth to a daughter, the Princess Shigeiko Teru-no-miya. The second Imperial daughter, Princess Sachiko Hisa-no-miya, was born on September 10, 1927, but died in March 1928.

Her Majesty owes her health and graceful figure to athletic exercises and dancing of which she was very fond. While she was still under her father's roof she took physical exercises for certain hours every day after her lessons were over, practising, among other methods, with the "naginata" or halberd, a weapon used in older times in woman's military art, under the tutorship of Madam Tsuchitori, a teacher in the Tokyo First Prefectural Girls High School. She is also gifted with musical talent, the piano being her favourite instrument, on which she received instruction from Madame Ayako Kambe, a talented pianist and professor in the Tokyo Academy of Music. According to Madame Kambe, the Princess had a pianist's hands, not too slender for forceful execution and could play Beethoven and Chopin with real skill, in which she was aided by the pains she took in mastering technique. Her singing voice was soft and mellow, and quite charming in conversation. On the koto she plays well also. The Princess took interests in all forms of sports, and was especially good at lawn tennis. Mr. Ichiya Kumagai, the well known tennis player, who had the honour of coaching the Empress in her Princess days, says that she acquired skill very quickly, having practised in soft ball playing previously. She was most enthusiastic in mastering the technique of tennis as she was in learning every thing else, and was especially good at the fore-hand stroke. It was a happy sight to witness Her Majesty

playing tennis in mixed doubles with the Prince Regent (now Emperor) on the court at the Akasaka Palace. Trained on somewhat different lines to the previous Empresses, and with fresh developments taking place among the womanhood of Japan, the Empress is expected to be a real power for good and the advancement of her people, aided by the Emperor's clear understanding of affairs and ready sympathy. Fortunate, indeed, are the Japanese people in having two such fine characters united on the Throne.

Prince and Princess Chichibu

Prince Yasuhito Chichibu, second son of the late Emperor Taisho Tenno and younger brother of the reigning sovereign and Heir Presumptive, was born on the 25th of June, 1902, at Akasaka Palace, Tokyo. He was first educated at the Peers' School where he received primary education on the same benches with the sons of the ordinary titled class for about six years, and after finishing the middle course of the institution he entered the Central Military Preparatory School at the age of fifteen to prepare himself for military life. Graduating in the spring of 1920 the Prince next entered the Military Academy or Cadets' School from which he passed out in June, 1922, at the age of twenty. While studying at the Army schools he lived in the dormitories like all other students, most of whom were sons of army officers of the commoner class and shared the same fare with them. On his attaining his majority in the spring of 1922 the Prince, who was heretofore known as Prince Yasuhito Atsunomiya, founded a new house Chichibu-nomiya by Imperial order and changed his name to Prince Yasuhito Chichibu-nomiya. In October the same year he was assigned to the 1st infantry regiment of the First Army Division as cadet, later being appointed Sub-Lieutenant, and on the auspicious occasion of the silver wedding of the Emperor (Taisho) and Empress in May, 1925, he was promoted to full Lieutenant. On the 25th of the same month the Prince sailed for England where he resided with General Drummond. He matriculated at Oxford as a special student but while studying there had to give up his original plan on account of the serious illness and subsequent demise of his father Taisho Tenno who died on December 25th, 1926, and hurriedly returned home in January next year, travelling via Canada and the United States. At Washington he was a guest of Mr. Matsudaira, at that time our Ambassador there, and for the first time met his daughter Miss Setsuko. The Prince was so much impressed with her personality and accomplishments, it

is understood, that this incident in time so happily developed as to unite the two in life.

The mourning for the demise of the late Emperor Taisho over, Prince Chichibu returned to his military duties at the Azabu regiment, where he continues to retain his post. On September 28 this year the Prince married Miss Setsuko Matsudaira, daughter of Mr. Matsudaira and niece of Viscount Matsudaira, the nuptials being celebrated and conducted in the atmosphere and pomp of the ancient court life and custom, and amid the jubilant rejoicings of the entire nation.

No Imperial Prince of Japan has ever been associated with the public so intimately as Prince Chichibu. In the past the public were not given opportunities to meet any member of the Imperial family in informal and personal ways. This gap has, however, been bridged by Prince Chichibu. In his school days and army life, he has conducted himself most democratically, removing all formalities and associating with all classes of people. Through his daily conduct, he has revealed to the public his true character and habits, the Prince having not once claimed from his superior officers any consideration for His Imperial status throughout his service in the Army. Indeed, he has given to the public opportunities to see the true qualities of the Imperial Princes at close range, and this intimacy between the Prince and the public has made him the most popular man in the whole Empire of Japan. Alert of mind and body the Prince is fond of sports and holds very good records in mountaineering, ski-ing, rowing and track-athletics. Indeed, no portrayal of the Prince is complete without some tribute to his sportsmanship. While staying in Europe the Prince scaled the Alps in the summer of 1926, as every mountaineer remembers, and in the summer of 1927 he conquered the heights of Okuhodaka of Japan Alps amid a severe thunderstorm. In the 1926 edition of the British Ski Year Book, we find Mr. Lunn writing about the Prince as a skier as follows: "As a ski-mountaineer he (Prince Chichibu) is one of the easiest people to follow on a rope that I know. The pure stem turn is the key to roped-ski-ing, and the Prince does this turn to perfection. On the glaciers his steadiness was invaluable, and he ran quite as fast as was comfortable for the man behind."

The Prince is an honorary member of the Ski Club of Great Britain (S.C.G.B.) and at the same time a member of the Alpine Ski Club (A.S.C.), the Swiss Alpine Club (S.A.C.), and the Alpine Club of England. His Highness is also honorary President of the British Society (Tokyo), the Siamese Society (Tokyo) and the International Industrial Conference.

Princess Chichibu

Princess Setsuko Chichibu, formerly Miss Setsuko Matsudaira, is a daughter of Mr. and Mrs. Tsuneo Matsudaira, and was born on September 9, 1909, at Walton-on-Thames, England, her father being at that time attached to the Japanese Embassy in London, in the capacity of second secretary. Her father comes from no ordinary stock as he is a direct descendant of the powerful feudal rulers of the Aizu clan that thrived in the Tokugawa days. When he was appointed Ambassador to Washington and left for the new post in 1925 with Mrs. Matsudaira, Miss Setsuko, then seventeen years old, accompanied her parents and entered the Friends' School in Washington where she remained until the time of her departure for home in May, 1928. While in Washington Miss Setsuko Matsudaira cut a prominent figure in the society of the American capital. Everywhere at school and in social functions alike her presence breathed refined candour and assurance. At no other time was the love of sports among the young womanhood of Asia so ably demonstrated as by Miss Matsudaira and Miss Sze, daughter of the Chinese Minister, who, moreover did extremely well in their class rooms.

The betrothal of Prince Chichibu and Miss Setsuko Matsudaira was officially announced in May this year, and the bride-elect returned home in June with her parents, who were coming home on furlough. On September 28 Miss Setsuko was happily married to Prince Chichibu and is now Princess Chichibu.

It may be noted here that the marriage of Miss Setsuko with Prince Chichibu is full of significance in one respect, it being the first instance where a Prince of the Blood has married one not belonging to the privileged classes. In order to make their

union permissible in accordance with the Imperial House Law, Miss Setsuko was, therefore, registered as an adopted daughter of Viscount Matsudaira, who is a near relative of her father Ambassador Matsudaira.

Imperial Accession Law

**Issued on February 11th of the Forty-Second Year
of the Meiji Era (1909 A.D.)**

We hereby promulgate the following Imperial Ordinance relating to the Accession, which has been approved by the Privy Council:—

Article I.—When the Emperor ascends the Throne the Chief of Ritualists shall conduct a service at the Kashiko-dokoro (Imperial Sanctuary) and announce the fact to the Koreiden (the Shrine of the Spirits of the Imperial Ancestors) and to the Shinden (the Shrine of the Gods).

Article II.—As soon as the Accession is over, the name of the Era shall be changed. The name of the new Era shall, after consideration by the Privy Council, be decided by the Emperor.

Article III.—The name of the new Era shall be announced by an Imperial Ordinance.

Article IV.—The Grand Ceremonies of the Enthronement and the Daijosai (the Ceremonies of Offering Rice by the Emperor to the Gods and the Spirits of the Imperial Ancestors) shall be conducted during a set period between Autumn and Winter. The Daijosai shall be performed immediately after the Grand Ceremony of the Enthronement.

Article V.—In conducting the Grand Ceremonies of the Enthronement and the Daijosai the Commission entrusted with the Grand Ceremonies of the Enthronement shall be appointed and attached to the Court to manage all affairs relating thereto. The official organization of the Commission for the Grand Ceremonies of the Enthronement shall also be announced simultaneously.

Article VI.—The dates of the Grand Ceremonies of the Enthronement and the Daijosai shall be publicly announced over the joint signatures of the Minister of the Imperial Household and Ministers of State.

Article VII.—When the dates of the Grand Ceremonies of the Enthronement and the Daijosai are fixed, the Emperor him-

self will announce the details to the Kashiko-dokoro, Koreiden and Shinden. The Imperial messengers shall, at the same time, be sent to the Imperial Great Shrine at Ise, the Mausoleum of the first Emperor Jimmu Tenno, and the Mausolea of the last four Ancestors of the new Emperor respectively to report the particulars.

Article VIII.—The fields for the growing of rice to be used at the Daijosai shall be selected in the districts to the east and south of Kyoto, which will be known as "Yuki," and in the districts to the west and north of Kyoto, which will be called "Suki." These districts shall be selected by the Emperor.

Article IX.—When the Yuki and Suki districts are selected the Minister of the Imperial Household shall issue instructions to the Governors within whose jurisdiction the districts are situated, ordering them to make the necessary arrangements with the owners of the ricefields, who will cultivate the plants and present the new rice to the Imperial Court.

Article X.—When the harvest season arrives, Imperial messengers shall be dispatched to the Yuki and Suki rice-fields to conduct the ceremony of harvesting the rice.

Article XI.—Prior to the dates fixed for the Grand Ceremonies of the Enthronement, the Emperor and Empress, with the Sacred Treasures, will proceed to the Kyoto Palace.

Article XII.—On the day on which the Grand Ceremonies of the Enthronement are conducted, an Imperial messenger shall report the fact to the Koreiden and Shinden.

On the occasion of the Daijosai Ceremony the Imperial messengers shall be ordered to report the details before the Imperial Great Shrine at Ise, the Koreiden and Shinden, and they, with the Governors of the Provinces to which they are sent, shall worship at the local shrines.

Article XIII.—On the day immediately preceding the Daijosai Ceremony there shall be conducted the Chinkon-shiki (a service to pray for peace and long life and prosperity for the Emperor and Empress).

Article XIV.—The Grand Ceremonies of the Enthronement and the Daijosai shall be conducted in accordance with the Supplementary Regulations.

Article XV.—After the Grand Ceremonies of the Enthronement

ment and the Daijosal are completed, Banquets will be given.

Article XVI.—After the Grand Ceremonies of the Enthronement and the Daijosal, the Emperor and Empress will visit the Imperial Great Shrine at Ise, the mausoleum of the first Emperor Jimmu Tenno, and the mausolea of the last four Ancestors of the new Emperor.

Article XVII.—When the Emperor and Empress return from Kyoto to Tokyo their Majesties will worship before the Koreiden and Shinden.

Article XVIII.—During the period of mourning for the late Emperor or Empress Dowager, there shall be no Grand Ceremonies of the Enthronement and Daijosal.

The Imperial Coronation Address

The following Imperial address was delivered by the late Emperor Taisho Tenno on the occasion of the Coronation Ceremony held at the Shishinden on November 10, 1915:—

"Having, by virtue of the glories of Our Ancestors, ascended the Imperial Throne of divine origin, we do hereby perform the Ceremony of Accession.

"Our Imperial Ancestors having laid the foundation of Our Empire, Our wise Predecessors, in pursuance of the divine command coeval with Heaven and Earth, have each succeeded to the Imperial Throne transmitted to him in an ever-unbroken line together with the Divine Treasures of Our Imperial House, and have reigned over and governed the people within Our Imperial dominions with benevolent care. The forefathers of you, Our subjects, have, on their part, been constant and loyal in their service to the Imperial House. Thus consecrated by the ties that unite the Sovereign and the subjects with the strength of the bond between father and son, Our Empire has developed a character which has no equal on this earth.

"Our illustrious Father brought forth upon this Empire a new era of prosperity and settled his mind on a great policy of opening the country to foreign intercourse. He further promulgated the fundamental law of State by expounding the bequeathed precepts of Our Imperial Ancestors, and effected an unparalleled great achievement giving a full scope of efficiency to the work of the Imperial régime. His eminent virtue thus shed its lustre abroad and his benevolent influence was felt everywhere.

"Now that we have inherited the grand work of Our Father, it is Our will to secure, on the one hand, a permanent stability of Our State by consolidating its foundations, and to share, on the other, the benefit of peace and harmony by strengthening the friendship with other nations. May the Heavenly Spirits of Our Ancestors, to whom we owe so much, witness Our determination that We will fulfil Our mission by diligently labouring day

and night. We trust that you, Our loyal subjects, will guard and maintain the prosperity of Our Imperial Throne by performing with assiduity your respective parts and duties. It is Our wish to make ever more brilliant the glory of Our country by the united and harmonious co-operation of all. We command you, Our subjects, to be guided by these Our views."

The Prime Minister's Reply

Upon the conclusion of the Imperial Speech, Count Okuma, then Premier, took up a position in front of the Throne and read the following congratulatory address in reply to the Speech from the Throne:—

"I most humbly present an address to the Throne. Your Majesty, having succeeded to the Imperial Throne which has through all ages been occupied by one and the same Dynasty, and taken up the Sceptre of the Empire, now ascends the Throne and holds the solemn Ceremony of the Accession. The entire nation rejoices with a full heart, and I, Your Majesty's humble servant, am filled with Infinite joy.

"The Imperial Ancestors transmitted to Their Descendants the divine ordinances which are eternal as Heaven and Earth, and brought the country under Their rule; They handed down the Three Sacred Treasures and made the chiefs of the five tribes Their subjects. Thus, the foundations of the Empire unchangeable through all ages was definitely consolidated and the relations of Sovereign and subjects were firmly established.

"The Founder of the Imperial Line was brave and far-sighted to carry out the divine will of His Ancestors in transmitting the rule of the country and to extend the work begun by His Divine Ancestors. He led the Imperial Army and subjugated the middle provinces and ascended the Imperial Throne. He decided personally in all matters and by His wise government left a shining example to posterity. The descendants of the various tribes who served His descendants also all followed the spirit of their forefathers and gave loyal support to the Imperial rule. To Him belongs the illustrious title of the Founder of the Empire, and sublime is the work of the Imperial rule which was established to last forever.

"His late Majesty of glorious memory, upon accession to the Throne, unfolded the Imperial plan of renovation by settling the great policy of restoration and of opening the country, and established uniform government by adopting what is good and excellent in foreign countries and, abolishing the old feudal system, made clear the basis of government by promulgating the imperishable Constitution, strengthened the military and naval defence by setting up the military system, ensured the moral and intellectual well-being of His subjects by the spread of education, increased the affluence of the people by fostering agriculture and industry, and increased the efficiency of general administration by reforming the institutions. Thereupon the political order of the State was greatly enhanced and the prosperity of the nation grew unceasingly.

"Your Majesty, having succeeded to the Imperial Throne and inherited the grand work of the Imperial régime, is ever anxious to fulfil, in pursuance of the wise policy of your great Father and Ancestors, Your high mission by strengthening the stability of the Empire and by making manifest the virtuous glory of the Imperial rule. Now on this happy occasion of the Grand Ceremony Your Majesty has been graciously pleased to favour us with Your brilliant speech, elucidating the fundamental character of the foundation of the Empire and teaching the ways to be observed by Your subjects, and we, Your Majesty's humble subjects, are deeply moved.

"Your Majesty, with Your heavenly qualities of benevolence, filial piety, modesty and self-restraint, has begun a most glorious reign, and with the divine aid of the Imperial Ancestors and His late Majesty always attending Your Majesty's person, the Imperial work is more prosperous and the Imperial virtues are more illustrious than ever; and the whole world resounds with high praises of Your Majesty. And we, Your humble subjects, solemnly swear to show our gratitude for Your Majesty's gracious will by ceaselessly labouring to the utmost extent and, with one heart, stimulating the spirit of fidelity and making every endeavour to prove the sincerity of our feeling.

"We, Your Majesty's subjects, who are fortunate to attend those magnificent ceremonies, and see propitious clouds hang round the lofty hall and golden banners flutter in the breeze:

of benevolence, can hardly contain ourselves for joy. In the name of all the subjects of this Empire, I, Your Majesty's humble servant, most respectfully present our heartfelt congratulations on this auspicious occasion, and tender our sincere wishes for a long life to Your Gracious Majesty."

The Imperial Inauguration Rescript

On the morning of December 28, 1926, three days after the demise of Emperor Taisho, the ceremony of the first audience was held at the Imperial Palace, when the new Emperor read a Rescript as follows:

"Having succeeded, through the benign influence of Our Imperial Ancestors, to the Throne of a lineal succession unbroken for ages eternal, and having assumed the power to reign over and govern the Empire We have now performed the ceremony of the Ascension to the Throne. It is Our resolve to observe the fundamental rules of the State, to cultivate the inherited virtue, and to maintain intact the glorious tradition set by Our Ancestors.

Our Imperial Grandfather, endowed with supreme wisdom and discernment in matters civil and military, enhanced the grandeur of the Empire. He promoted educational developments within, and consummated military achievements abroad. He promulgated the Constitution imperishable for all ages, and consolidated the system of government unparalleled in the world. Our Imperial Father had always near his heart a reign of right and justice, and made it his constant aim to follow and to brighten the path laid by his Predecessors. Unfortunately, his health failed in the prime of his life, and We, being Heir to the Throne, were called upon to act as Regent. He has now passed away amidst our unbounded grief and sorrow. The Throne, however, cannot be left unoccupied for a moment; the reigns of government can at no time be permitted to drop. Mournful and heavy-hearted, We have now succeeded to the Imperial line. With Our limited gifts, We are mindful of the difficulty of proving Ourselves equal to the great task that has devolved upon Us.

The conditions of the world have recently undergone signal changes. The thoughts of men are liable to follow contradictory channels. The economic life of the nation is occasionally marked by the conflict of varied interests. Accordingly, it is important

to fix one's eyes upon the general situation of the country, and to unite the efforts of the whole Empire in promoting the solidarity of the nation, in strengthening still further the foundation of national existence and in securing forever the prosperity of Our people, to the end that the brilliant work of the Imperial Restoration may shed a fresh and increasing lustre.

The world is now in the process of evolution. A new chapter is being opened in the history of human civilization. This nation's settled policy always stands for progress and improvement. The course of events both at home and abroad and the message of the past to mankind clearly indicate that progress must be attained by degrees and that improvement must be sought in the mean. Such teachings should engage the careful attention of every one.

Simplicity instead of vain display; originality instead of blind imitation; progress in view of this period of evolution, and improvement to keep up with advancing civilization, national harmony in purpose and in action; beneficence to all classes of people, and friendship to all nations of the earth:—these are the cardinal aims to which Our most profound and abiding solicitude is directed. They are in line with the illustrious precepts bequeathed by Our Imperial Grandfather, and are calculated to give effect to the gracious will of Our Imperial Father. It is Our desire that all those who are in the public service of the State will be guided by Our views above set forth; that they will stand by Us and support Our endeavors in the same manner and spirit as they served Our Imperial Grandfather and Our Imperial Father and that, in cooperation with all Our subjects, they will uphold the Throne sacred and immutable for eternity."

CHAPTER I

GEOGRAPHY

POSITION, AREA, TERRITORY AND CLIMATE

Japan is situated in the east of the Continent of Asia and in the west of the Northern Pacific lying between $21^{\circ}45'$ and $50^{\circ}56'$ N. latitude and $119^{\circ}18'$ and $156^{\circ}32'$ E. longitude. The territory comprised within this limit consists of six large islands, i.e. Honshu, Shikoku, Kyushu, Hokkaido, Taiwan (Formosa), Southern Karafuto (Saghalien below 50° lat.) and the Peninsula of Chosen (Korea), and about six hundred smaller islands. Of these islands Sado, Oki, Tsushima, Iki, Awaji and the four archipelagoes of Hoko (Pescadores), Chishima (Kuriles), Ogasawara (Bonin) and Ryukyu (Luchu) may deserve mention, all the rest being insignificant. Japan proper consists of the four large islands of Honshu, Shikoku, Kyushu, and Hokkaido, and is exclusive of Formosa and its adjoining islands, Saghalien and Korea.

After the China war (1894-1895) Japan acquired Formosa and the Pescadores, after the Russian war (1904-05) the southern half of Saghalien, and also obtained a free hand in Korea, which she has since annexed. The realm now covers 260,704.23 sq. miles distributed as follows as to area:—

	Area (sq. miles)	Percent. of Area	Coast line (miles)
Japan Proper	147,651.65	56.64	17,179.98
Honshu (with outlying is.)	(86,771.75)	(33.28)	6,040.87
Shikoku (")	(7,030.95)	(2.70)	1,049.18
Kyushu (")	(15,587.08)	(5.98)	4,506.90
Hokkaido (")	(29,976.95)	(11.61)	1,587.37
Kuriles (31 islands).....	(6,023.47)	(2.31)	1,442.80
Luchu (55 islands).....	(834.40)	(0.36)	768.84
The others	(1,028.79)	(0.39)	1,176.71
Saghalien (Karafuto)	2,024.30	5.34	945.01
Korea (Chosen)	85,228.68	32.69	9,324.00
Formosa (and Pescadores, with outlying is.).....	13,889.50	5.33	973.29
Total	260,704.23	100.00	28,422.27

Note.—All the outlying islands having coast line of over 2 miles and also smaller islands that are inhabited are included in the total area.

PHYSICAL FEATURES

Mountains.—The land is mountainous and volcanic. The most conspicuous ranges are, in the west and south, two branches of the Kwen-Lun system of China of which one, the Chugoku range, traverses Kyushu and finds its way into the middle part of Honshu, while the other coming from Shikoku also enters

the middle Honshu. In the north there is the Saghalien system which forms the ridges in Hokkaido and northern Honshu. These ranges encounter at the middle of Honshu, thereby producing upheavals popularly known among mountaineers as the Japan Alps, and other prominent peaks such as Fuji, Norikuragatake, etc.

Many volcanoes occur in these ranges. The Aso and Nasu volcanic chains form part respectively of the branches of the Kwen-lun and the Saghalien system, while the Fuji volcanic range traverses the Seven Islands and Peninsula of Idzu and joins the two main systems at the middle of Honshu, which in this part rise in peaks of over 10,000 ft. in height. The Fuji range divides Honshu into two main sections, Southern Japan and Northern Japan.

The Nasu volcanic range and Chugoku range part Honshu into what are called the Omote (front) Nihon, or Pacific board and the Ura (back) Nihon, or Japan Sea board, these two presenting striking difference in climatic and other physical conditions as well as in civilization. The Kirishima volcanic range occurs in the Luchu and Osumi Islands and enters Kyushu while the Kuriles have also a volcanic chain which stretches to Hokkaido. Korea and Formosa have their own mountain ranges and volcanic chains. In the latter there are 48 peaks of above 10,000 ft.

There are in Japanese territory over 231 mountain peaks each measuring above 8,000 ft., of which the first 39, with the sole exception of Mount Fuji, are in Formosa. The following are the principal peaks in Japan proper measuring above 2,640 metres:—

Japan Proper		
Name	Locality	Height (metres)
Mt. Fuji	Suruga-Kai	3,777
Shirane Kitadake	Kai	3,192
Shirane Ainotake	Kai-Suruga	3,189
Yarigatake	Hida	3,180
Higashidake	Suruga	3,146
Akaishidake	Shinano-Suruga	3,120
Oku Hodaka	Shinano-Hida	3,102
Hodaka	"	3,090
Arakawadake	Suruga	3,083
Ontake	Hida	3,063
Shiomidake	Shinano-Hida	3,033
Senjogatake	Shinano-Suruga	3,048
Kita Hodaka	Kai	3,033
Shirane Nodoridake	Shinano	3,026
Norikuradake	Kai-Suruga	3,026
Hijiridake	Shinano-Suruga	3,011
Tsurugidake	Etchu	2,998
Tateyama	"	2,992
Formosa		
Niitaka (Mt. Morrison)		3,962
Tsugitaka (Mt. Sylvia)		3,921
Shukoran-san		3,832

Maboras-san	3,806
Nankodai-san	3,797
Chuo Senzan	3,715
Kwan-san	3,667
Daisuikutsu-san	3,645

Korea

Peku-tu-san	2,697
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Rivers.—Due to the insular position and complicated topography, rivers are comparatively short and of rapid current. They are not navigable for large sea-going vessels, but owing to frequent rainfalls they sufficiently serve the purpose of irrigation and hydraulic power.

Principal rivers are given below with their length, drainage area, etc.

Flowing into	Name	Length miles	Drainage basin sq. miles	Navigable length miles
Sea of Japan	Agano (Honshu)	105	3,212	217
	Go-no "	124	1,471	124
	Ishikari (Hokkaido) ..	227	—	—
	Mogami (Honshu) ...	134	2,858	215
	Omono " ...	93	1,614	142
	Rakuto (Korea)	327	9,212	215
	Shinano (Honshu) ...	229	4,734	344
	Teshio (Hokkaido) ..	193	—	—
	Tumen (Korea)	325	4,061	54
	Noshiro (Honshu) ...	85	1,584	124
Pacific Ocean	Abukuma (Honshu) ..	122	2,114	81
	Arakawa " ...	110	1,209	154
	Kiso " ...	144	2,513	278
	Kitakami " ...	152	4,139	225
	Nakagawa " ...	78	1,262	68
	Tenryu " ...	134	1,888	176
	Tokachi (Hokkaido) ..	122	—	—
	Tone (Honshu)	200	6,086	415
Inland Sea	Yoshino (Shikoku) ..	146	1,429	146
	Yodo (Honshu)	49	3,246	220
Okhotsk Sea	Tokoro (Hokkaido) ..	90	—	—
East China Sea	Chikugo (Kyushu) ...	88	1,102	117
	Dakusui (Formosa) ..	95	—	—
Yellow Sea	Daido (Korea)	273	6,437	161
	Kan "	320	10,147	205
	Yalu "	491	12,255	434

* Including tributaries.

Lakes and Ponds.—There are many of these inland water basins, adding much to the scenic beauty of the country, though most of them are small in size. They are generally of volcanic or seismic origin, or have been formed by gradation. Among lakes of over 1.5 sq. mile in size and lying at high altitude may be mentioned Suganuma (1,755 metres above sea level) and Lake Chuzenji (1,616 m. above s. l.). As regards depth, Lake Shikotsu (247 fathoms), Lake Tazawa (223 f.) and Lake Towada (205 f.) head the list.

The circumference of the principal lakes is as below:—

	miles		miles
Biwa-ko	146.15	Inawashiro-ko	40.33
Furen-ko	41.08	Kasumiga-ura	84.19
Hachiro-gata	48.81	Saroma-ko	65.89
Hamana-ko	57.14	Tomnai-ko	48.81
Imba-numa	44.74	Towada-ko	39.04

Chuzenji in Nikko (14.78 miles), Ashi-no-ko in Hakone (12.46 miles), Suwa-ko in Shinano (11.25 miles), are noted mountain lakes.

Plains.—As might be expected from the hilly nature of her topography Japan cannot boast of large plains, and indeed land inclined 10° and below does not exceed a quarter of the whole area. But small alluvial plains are not scarce, the valleys of larger rivers being especially fertile. Of these the Kwanto plain, watered by two large rivers, Tone and Arakawa, is most important and contains Tokyo, Yokohama and many other towns and cities, supporting altogether over 10 millions of souls. The Nobi plain consists of the valleys of Kiso and other rivers and feeds over $2\frac{1}{2}$ million people, clustered in Nagoya and other towns and cities. Other plains in Honshu are the Kintai plain with Kyoto, Osaka, Kobe, etc. in it, containing $4\frac{1}{2}$ million people, and traversed by the Yodo and other rivers; the Echigo plain traversed by the Shinano and Agano rivers; the Sendai plain watered by the Kitakami and the Abukuma. Hokkaido has Ishikari and six other large plains. The Tsukushi plain in Kyushu contains coal fields, where 60 percent of the coal produced in Japan is mined. In Korea the valleys of the Kan-go are reputed to be among the most developed in the Peninsula.

Adjacent Seas.—The East China Sea is shallow except for the portion near Formosa and the Luchu, but the Sea of Japan is deeper, the maximum being 1,880 fathoms. Great depressions are found in the Pacific waters not far from the land. Among them may be mentioned the Tuscarora deep which extends for 400 miles along the Kuriles and has a maximum depth of 4,655 fathoms; and the Luchu deep, where 4,041 fathoms has been sounded.

Ocean Currents.—Warm and cold currents encounter in Japanese seas, which has a favorable effect upon the fishing and marine product industries of the country. The great warm current in the North Pacific, the Black (or Japan) Current, runs along the southeastern shores of Formosa and Japan proper to about $35^{\circ}6'$ N. latitude where it bifurcates and takes a north-easterly course. The Tsushima Current which branches from the above near the Luchu Is. passes through the Strait of Tsushima and washes the Japan Sea board of Honshu, finally reaching Saghalien. The cold currents in the Japan Sea are the Liman Current which, after touching the Continental shores, streams along the northeastern coast of Korea; and the Okhotsk Current in the Okhotsk Sea. The Oyashio, or Chishima Current, is also cold and washes the Pacific side of the Kuriles, Hokkaido, and Northeastern Honshu. It meets one of the branches of the Black Current off the Ojika Peninsula, where there is a bank that furnishes a good fishing ground.

Though visited by cold streams the Japanese seas are ice-

free, save in the extreme north of the Korean waters where ice-breakers are necessary in winter. Part of the Northern Pacific north of Cape Erimo, is also visited by floating ice and ice fields which are a menace to navigation from January to April.

Tides.—Tides register a very high range on the Yellow Sea and East China Sea coasts, reaching as much as 34-5 ft. at Chemulpo, Korea. In Japan proper the highest range is 18 ft. at the port of Milke, Kyushu. The difference is 6-13 ft. in the Inland Sea, 6-9 ft. on the Pacific coast and 4-5 ft. on the Okhotsk. The Sea of Japan is one of the waters with the smallest tidal range in the world, being scarcely more than 2 ft. except at the Tsushima Strait. At Naruto, one of the narrow straits by which the Inland Sea communicates with the Pacific, the tidal streams form eddies and whirlpools which present a unique sight.

Harbors and Bays.—The Pacific coast is far more diversified in outline than the Japan Sea coast. The coast line of the former measures in aggregate 10,310.3 miles against 2,818.6 miles of the latter. In Honshu alone the outer coast measures 3,199.3 miles. Japan, i.e., from Cape Shiriya to Cape Inubo not far from Tokyo Bay, has only one continuous large inlet, the Bay of Sendai and the Bay of Matsushima embraced by the Ojika Peninsula, but for about 146 miles north of Sendai it is rich in smaller indentations and forms a Ria coast. The southern coast of Honshu extending from near Tokyo Bay to Cape Satta in Kyushu abounds in large indentations and furnishes several excellent anchorages. These and the other only 1,588.6 miles. The eastern coast of Northern inlets are Tokyo Bay, Gulf of Sagami, Bay of Atsumi, Bay of Ise, Strait of Kii and Gulf of Tosa.

The Inland Sea may practically be regarded as one large inland basin, being connected with the outer sea by four very narrow straits, i.e., Shimonoseki, Hayatomo, Yura and Naruto. It is dotted with small islets and renowned for its charming scenery.

The China Sea coast of Kyushu is much indented, and over the sea are scattered the islands of Goto, Hirato, Amakusa and Koshiki. In the northwest the Nishisonogi, Nomo and Shimabara peninsulas divide the coast into the four bays of Omura, Nagasaki, Sasebo and Milke. The bay of Kagoshima also may be mentioned, for it contains the volcanic island of Sakurajima on which there was an eruption years ago.

The western part of the Japan Sea coast is much zigzagged and between Korea and Kyushu there exists a narrow strait rather shallow in depth. This strait is further divided into three, i.e., Iki, East Tsushima and West Tsushima channels, by the two islands of Iki and Tsushima which lie in it. The West Tsushima channel is only 4,700 metres wide.

The monotonous nature of the Japan Sea coast of Honshu is somewhat diversified by the presence, here and there, of lagoons formed by the action of waves and wind. Nakanoumi Lagoon is one of such depressions. The only noteworthy indentation along the whole coast is that forming the Gulf of Wakasa on which are situated the secondary naval port of Maizuru, and the harbors of Miyazu, Tsuruga, etc. One interesting geographical feature is that owing to the presence of the gulf the most constricted neck of Honshu exists there.

Between Gulf Wakasa and Tsugaru Promontory the curves

formed by Noto and Oga Peninsulas are worthy of mention, whatever other inlets there may be being insignificant and at best forming river ports of no great value. The Oga Peninsula encloses the Hachiro-gata, a lagoon with beautiful scenery. The Gulf of Mutsu, in which lie Aomori and Ominato, a secondary naval port, opens to the Tsugaru Strait but the mouth is narrowed by the Shimokita Peninsula. The Tsugaru Strait separates Hokkaido from Honshu with a width of only 20,000 metres and a maximum depth of 111 fathoms. It is well known as Blackeston's line.

The coast of Hokkaido and of Formosa is not much better off for anchorages. The former is characterised by the presence of sand dunes formed by strong wind and sediment brought down by rivers. The Volcanic Bay and Oshima Peninsula, Nemuro Bay and Ishikari Bay only deserve mention. The coast of Formosa presents a sharp contrast in the eastern and western shores, the former ending abruptly in deep water and the latter terminating in shelving bottom with shoals. The three larger islands of the Pescadores group enclose between themselves an important anchorage. The Japan Sea coast of Korea is very monotonous, while the Yellow Sea board is full of indentations, of which West Korea and Gunsan Bays are the largest, containing Ryugampo, Chemulpo, Gunsan, Moppo and other harbors. This part also abounds in islets. The south coast of the Peninsula is not marked by large zigzags but has excellent anchorages, such as Masan and Fusan.

Harbors Open to Foreign Steamers

Yokohama (Honshu)	Wakamatsu (Kyushu)	Anping (Formosa)
Kobe	Moji	Goro
Nilgata	Hakata	Rokko
Osaka	Karatsu	Toseki
Yokkaichi	Kuchinotsu	Kokoko
Shimonoseki	Misumi	Mekong
Taketoyo	Suminoe	Fusan (Korea)
Shimizu	Kagoshima	Moppo
Tsuruga	Sasuna (Tsushima)	Gunsan
Nanao	Shishimi	Chemulpo
Ebisu	Izukahara	Yuki
Fushiki	Nawa (Luchu)	Chinnampo
Sakai	Hakodate (Hokkaido)	New Wiju
Hamada	Otaru	Ryugampo
Miyazu	Kushiro	Gensan
Itozaki	Muroran	Joshin
Aomori	Nemuro	Seishin
Nagoya	Keelung (Formosa)	Masampo
Tokuyama	Tamsui	Chinkai
Imabari (Shikoku)	Takow	Otomari (Karafuto)
Nagasaki (Kyushu)	Kyuko	Maoka
Miike	Koro	

CLIMATE

Atmospheric Pressure and Wind.—The climate of Japan is chiefly governed by the prevalence of monsoons, that is the prevailing winds that periodically change their directions about

every half year. During the warm seasons what is called the summer monsoon prevails, its direction being generally south to southeasterly, while the winter monsoon that prevails during the cold seasons is north to northeasterly in direction. From the latter part of September to March a large area of high barometric pressure covers the whole of Eastern Siberia, its centre being the districts surrounding Lake Balkal. At the same time an area of low pressure appears over the northern Pacific, extending to the south of the Aleutian Islands. This results in the prevalence of anti-cyclonic wind over the whole of the Far East, its direction being west to northwest in Hokkaido, northwest in Japan proper, north in the Luchu Islands and northeasterly in Formosa. One of the characteristics of the winter monsoon is its marked constancy in strength. It continues to blow for many days together, being broken only by occasional visitation of the atmospheric disturbances called "cyclonic storm." From the latter part of April to the last decade of August what is known as the grand Pacific high pressure occupies the central part of the north Pacific Ocean, its western margin reaching as far as the eastern coast of Japan. Then in the Tibetan plateau there develops a great low area, with a secondary low area also developing over the Mongolian desert. Thus a system of cyclonic circulations of air is established all over the Far Eastern coast, and the air current from the Pacific flows in into the Continent past Japan and her neighbouring seas. This summer monsoon, however, is generally variable in strength and its duration is short.

We give below the mean monthly barometric reading at a few stations as reduced to the sea-level and given in mm. and a table showing the direction of prevailing winds at principal localities:—

Table I.—Atmospheric Pressure (in mm.)

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Year
	70.0+												
Taihoku.....	70.0	65.6	63.3	60.6	57.8	55.2	54.4	53.8	57.0	61.3	64.1	65.6	60.3
Fukuoka.....	66.6	65.6	64.4	61.9	59.1	56.2	56.2	56.3	59.1	63.2	65.8	66.8	61.8
Kagoshima.....	66.0	64.9	63.7	62.1	59.0	56.6	56.7	56.3	56.3	62.1	65.1	66.1	61.4
Hiroshima.....	66.0	65.3	64.4	62.0	59.2	56.5	56.6	56.6	59.2	63.1	65.6	66.0	61.7
Osaka.....	65.1	64.4	63.9	62.0	59.3	56.7	56.9	56.9	59.3	62.6	65.1	65.1	61.5
Nagoya.....	64.2	63.5	63.3	61.9	59.3	56.9	57.0	57.2	59.5	62.5	64.5	64.4	61.2
Kanazawa.....	64.5	64.2	63.9	62.0	59.3	56.6	56.8	57.0	59.6	63.0	64.8	64.3	61.3
Tokyo.....	62.4	62.1	62.5	61.6	59.0	56.9	57.2	57.6	59.9	62.7	63.7	62.5	60.7
Niigata.....	63.5	63.3	63.5	62.1	59.3	56.8	56.9	57.2	59.8	63.1	64.4	63.3	61.1
Ishinomaki.....	62.1	62.0	62.6	61.6	59.2	57.1	57.2	57.7	60.2	62.8	63.6	62.2	60.7
Hakodate.....	61.2	61.3	61.6	61.0	58.7	56.7	56.9	57.7	60.0	62.5	62.6	60.8	60.1
Nemuro.....	59.1	59.8	60.4	60.4	58.7	57.7	57.7	58.5	60.7	61.8	60.9	58.5	59.5
Bonin.....	63.3	62.4	62.6	62.0	59.7	56.6	56.6	56.5	56.7	60.3	62.2	62.9	60.8

Table II.—Directions of Prevailing Wind

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Taihoku.....	E	E	E	E	E	E	E	E	E	E	E	E	E
Fukuoka.....	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Kagoshima.....	NW	NW	NW	NW	NW	NW	NW	NW	NE	NW	NW	NW	NW
Hiroshima.....	N	NNE	NNE	NNE	S	SW	SW	NNE	NNE	NNE	NNE	NNE	NNE
Osaka.....	W	N	N	NE	NE	NE	WSW	NE	NE	NE	NE	W	NE
Nagoya.....	NW	NW	NW	NW	NW	S	S	S	NW	NW	NW	NW	NW
Kanazawa.....	SE	SE	E	E	E	E	E	E	E	E	E	SE	E
Tokyo.....	NW	NNW	NNW	NNW	S	S	S	S	NNW	NNW	NNW	NW	NNW
Niigata.....	NW	S	W	W	W	SE	N	SE	SE	SE	S	NW	S
Ishinomaki.....	NW	NW	NW	NW	S	S	S	S	N	N	N	NW	NW
Hakodate.....	W	W	W	W	SE	SE	SE	ENE	E	N	W	W	W
Nemuro.....	W	NW	NW	SSW	SSW	S	S	SSW	SSW	SSW	NW	W	SSW
Bonin.....	N	N	N	S	SSW	S	SE	S	E	E	N	N	N

Cyclones and Typhoons:—In speaking of winds in Japan and her neighborhood, it is necessary to mention the violent rotatory

storms called cyclones and typhoons. The former are also known by the name of Continental cyclones, and belong to the same category as the European rotatory storms. A cyclone is caused by the intruding polar front of general circulation in the higher latitude. These continental cyclones are most frequent in winter and are very rare in summer. The typhoon is of tropical origin as hurricanes observed in the Gulf of Mexico and the Atlantic and the cyclones visiting the Bay of Bengal and Arabian Sea. It is most frequent from July to October, the severest occurring usually in August and September. In winter this kind of atmospheric disturbance is rarely met with. Below is given the frequency of both kinds of rotatory storms, the statistics being quoted from Father Froc's well known memoir, "L'Atmosphere en Extreme Orient":—

Table III.—Frequency of Cyclones and Typhoons (1893-1918)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Cyclone	101	114	157	105	150	113	60	37	60	57	97	114
Typhoon.....	30	17	18	14	33	34	90	93	109	96	52	43

Air Temperature.—In winter the cold is intense in Japan proper for its latitude, owing to the cold air currents brought over from the Asiatic Continent by the winter monsoon, while being much milder than in the districts of the same latitude in Manchuria, Siberia, etc. The climate of Korea is more continental and colder than that of Japan proper, the territory forming part of the Continent. In Japan proper the interior of Hokkaido is also marked by continentality of climate, the temperature once recorded in Asahigawa being as low as -41° C.

In the hot season the air temperature on land being already high due to insolation, the effect of the summer monsoon there prevails is chiefly shown in the close or sultry air owing to the moisture borne from the sea. Summer in Formosa is most unbearable, because of the high temperature which lasts from the daytime far into the night, though the maximum is comparatively low. In Honshu and other islands of Japan proper, however, the heat lessens in the evening and morning. In Hokkaido it is as hot as in Honshu in the daytime when tropical clothes are needful, but it grows so cool before sunrise and after sunset, that people are liable to catch cold. On the coast of the Setonakai, or the Inland Sea districts, land and sea breezes are well developed, and consequently morning and evening calms marking the pause of these breezes occur very regularly. In the hours 7 to 9 p.m. during the hot season, the air in these districts is as still as dead, not a puff quivering the blades of grass, and one feels as if shut up in a hot house.

Below is given the monthly mean air temperature as well as mean daily maximum and minimum:—

Table IV.—Monthly Mean Temperature of Air (in $^{\circ}$ C.)

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Tokoku.....	15.2	14.7	17.0	20.8	23.9	26.7	28.1	27.8	26.1	23.0	19.7	16.8	21.6
Fukuoka.....	8.0	8.2	8.2	13.2	17.2	21.4	25.5	28.3	22.2	18.3	11.3	7.1	15.1
Kyushima ...	7.2	7.5	10.9	15.6	18.3	22.3	26.9	28.7	24.2	19.1	13.8	8.9	16.7
Hiroshima....	4.0	4.4	7.5	13.0	17.1	21.4	25.4	26.8	23.0	16.8	11.1	6.0	14.7
Osaka.....	4.2	4.4	7.6	13.8	17.8	21.8	25.9	27.9	23.4	16.2	11.5	6.5	17.1
Nagoya.....	3.4	4.0	7.2	13.2	17.4	21.6	25.7	26.6	22.9	16.6	10.7	6.3	14.6
Kanazawa....	2.5	2.4	5.4	11.1	15.5	20.0	24.1	25.5	21.5	15.4	10.1	5.1	13.2
Tokyo.....	3.0	3.9	6.9	12.6	16.8	20.5	24.1	25.5	21.9	15.8	10.5	6.2	13.9
Niigata.....	1.4	1.5	4.5	10.3	14.8	19.4	23.7	25.6	21.4	15.5	9.8	4.1	12.6
Ishinomaki ...	-0.3	0.3	3.2	8.9	13.2	17.2	21.8	23.1	19.8	13.8	7.4	2.4	10.9
Hakodate.....	-2.9	-2.1	0.9	6.5	10.5	14.5	18.9	21.5	17.8	11.5	-5.6	-9.1	8.6
Nemuro.....	-3.1	-2.4	-2.4	2.9	6.5	9.8	14.2	17.1	15.2	10.5	4.3	-1.5	8.6
Bonin.....	17.7	17.5	18.5	20.7	22.8	25.7	27.2	27.1	26.7	23.4	22.6	19.4	22.6

Table V.—Mean Daily Maximum Temperature of Air

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Tokyo.....	19.1	18.4	20.9	25.1	28.3	31.5	33.1	32.7	30.8	27.2	23.5	20.5	25.9
Fukuoka.....	9.6	9.7	13.1	18.5	22.6	26.1	29.9	31.1	27.5	22.3	17.0	11.6	19.9
Kagoshima ...	11.9	12.1	15.6	20.2	23.4	26.1	29.9	30.9	28.5	23.9	19.0	13.9	21.3
Hiroshima ...	9.0	9.4	12.7	18.2	22.3	25.6	29.6	31.6	27.8	22.6	16.9	11.4	19.8
Osaka.....	8.6	8.9	12.4	18.4	22.6	26.2	30.3	32.1	28.1	22.4	16.7	11.3	19.8
Nagoya.....	8.2	9.2	12.7	18.7	22.0	26.3	30.3	31.6	27.8	22.1	16.5	10.6	19.8
Kanazawa.....	6.1	6.4	10.0	16.4	20.6	24.5	28.4	30.4	26.5	20.6	14.9	9.0	17.8
Tokyo.....	8.3	8.6	11.9	17.5	21.1	24.5	28.1	29.8	25.9	20.5	15.7	10.8	18.6
Niigata.....	4.8	4.8	8.7	15.1	19.9	23.7	27.7	29.9	25.8	19.6	13.4	7.3	16.7
Ishinomaki ...	2.3	4.3	7.4	13.3	17.3	20.9	24.3	26.3	23.4	18.1	12.3	6.3	14.8
Hakodate.....	0.3	1.4	4.5	10.9	14.8	18.3	22.4	25.2	22.1	16.7	9.4	3.1	12.5
Nemuro.....	-2.4	-2.3	0.9	6.8	10.7	13.7	18.1	20.8	18.6	14.0	7.7	1.5	9.0
Bonin.....	10.7	20.5	21.7	23.9	25.9	29.1	31.0	30.4	30.2	28.8	25.8	22.0	25.8

Table VI.—Mean Daily Minimum Temperature

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Tokyo.....	12.3	11.8	14.1	17.4	20.4	23.0	24.2	24.1	22.6	19.8	16.9	14.0	18.4
Fukuoka.....	9.9	9.8	8.2	7.6	11.4	17.2	21.9	22.4	18.4	10.2	6.3	2.5	10.3
Kagoshima ...	2.9	3.2	6.4	11.3	14.6	19.0	22.7	21.3	20.9	15.1	9.4	4.6	12.6
Hiroshima ...	-0.2	0.0	2.6	7.7	11.9	17.4	21.7	22.8	18.9	11.9	6.1	1.6	10.2
Osaka.....	0.3	0.4	3.0	8.4	12.7	18.0	22.5	23.4	19.6	12.7	6.9	2.3	10.8
Nagoya.....	-0.9	-0.6	2.3	8.0	12.2	17.4	21.8	22.7	19.1	12.0	5.8	0.8	10.1
Kanazawa.....	-0.5	-0.8	1.4	6.2	10.7	15.9	20.3	21.5	17.7	11.2	6.0	1.3	9.3
Tokyo.....	-1.4	-0.6	2.4	8.1	12.2	17.0	20.9	22.1	18.7	12.3	6.2	0.5	9.9
Niigata.....	-1.2	-1.4	1.1	6.2	10.8	15.9	20.5	22.0	17.9	11.7	5.1	1.2	9.2
Ishinomaki ...	-3.8	-3.3	-0.6	4.8	9.4	14.3	18.4	20.3	16.6	9.8	3.6	-1.2	7.3
Hakodate.....	-7.4	-6.9	-3.4	1.8	5.7	10.5	15.4	17.6	12.8	6.0	0.9	-4.4	4.0
Nemuro.....	-8.8	-7.5	-6.2	-0.5	2.9	6.6	10.9	13.1	12.0	6.8	0.5	-5.1	2.0
Bonin.....	14.4	14.3	15.4	17.8	20.1	22.7	24.1	24.5	24.1	22.8	20.1	16.4	18.7

Precipitation.—During the cold season the northwesterly monsoon that comes from the Continent blows across the Japan Sea, where it takes up considerable quantities of moisture. This inflowing air current strikes our coast and is forced to ascend the slope of the central mountain ranges running almost parallel to the coast. Due to the adiabatic cooling of this ascending moist air a considerable quantity of precipitation, especially in the form of snow, falls as long as the wind continues blowing. In consequence, during winter deep snow covers the ground in the districts facing the Japan Sea, i.e. from northern Kyushu to Hokkaido, especially the region extending from Kanazawa to Otaru. In the prefecture of Niigata, especially in the upper valley of River Shinano, 10 to 20 feet of snow is the rule. In 1893 it measured 25 feet in Aoyagi village, Nakakubiki-gun, in that prefecture. The snowfall is also heavy in Hokkaido. Once a depth of 13 feet was recorded in Ebishima village, Ishikari province. In those snowy districts the drifts reach the eaves, so that the inhabitants make tunnels through them, or more generally live in the upper story rooms, the street traffic being carried on the beaten track over the snow. As a drift frequently piles up to several feet in a single night, it baffles the operation of the Russel plough and railway trains are often held up for days. On the Pacific board, which is separated from the Japan Sea coast by the central mountain ranges, the northwesterly monsoon blowing as a descending current the weather is mostly fair with the sky so clear and serene that not a speck of cloud dots it. Thus the winter weather along the Pacific and that along the Japan Sea boards with high ridges in between, are characterized by almost contrary phenomena. Only in the Northeastern districts where the central ranges are not so high the loaded current from the Japan Sea is borne over to the Pacific coast, so that the region extending from Aomori to Sendai and Koriyama is mostly covered with snow all through the winter, though the district south of these latter cities is free from the precipitation.

"Bai-u" or "Plum-rain."—During the warm season the situation is quite different. Besides, the general rainfall caused by the occasional visitation of cyclones and typhoons a long spell of wet weather prevails from the second decade of June to the first decade of July. This rainy season is commonly known as "Bai-u" or "Plum-rain", as it occurs when the plums are getting ripe. This "Plum-rain" season begins earlier in the lower latitude and progresses to the higher latitude. Thus the Luchu Islands have the rainy season in May, while in North Korea and Manchuria it is in July. The characteristic of the "Bai-u" lies not so much in the heaviness of rainfall as in the long spell of drizzling. Heavy precipitation in a short space of time mostly occurs with the visitation of typhoons in August and September, when torrential downpour of rain often causes the rivers to swell and overflow their banks. It is in these months that inundations and landslides frequently paralyse the railway service. In short, heavy precipitation takes place twice, i.e. in winter and summer on the Japan Sea coast, and once, i.e. in summer on the Pacific coast.

In the following tables are given the average monthly rainfall in m.m. and the number of rainy days:—

Table VII.—Amount of Precipitation (in mm.)

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Taihoku.....	83.8	137.8	172.1	191.6	236.2	281.1	213.2	292.6	249.7	131.9	74.3	78.2	3091.6
Fukuoka ...	69.3	82.8	116.4	131.8	122.9	255.5	267.5	136.5	186.8	108.6	74.0	78.8	1635.9
Kagoshima..	87.8	148.3	160.9	221.6	214.7	413.8	299.9	184.8	228.2	136.2	15.0	81.3	2225.4
Hiroshima...	64.9	64.9	112.2	171.8	160.1	262.6	222.9	103.4	186.0	112.8	67.6	82.3	1583.5
Osaka	60.3	60.1	106.0	142.1	124.0	201.4	146.0	107.6	181.6	130.5	75.6	48.1	1386.1
Nagoya	59.6	70.5	126.7	165.8	162.9	229.0	191.3	177.2	246.0	164.1	87.2	85.8	1794.5
Kanazawa....	277.0	187.8	167.9	163.4	144.6	183.8	309.8	164.6	241.9	204.2	266.7	352.5	2566.2
Tokyo	58.6	73.7	111.5	131.7	155.4	166.6	141.6	160.5	228.2	192.4	101.5	53.3	1572.9
Niigata	191.4	127.8	110.1	104.4	91.9	128.5	159.6	120.7	192.9	150.1	196.0	231.0	1413.6
Ishinomaki...	43.3	61.0	75.5	91.1	111.6	117.6	131.2	121.2	161.4	127.8	62.7	41.9	1142.4
Hakodate ...	62.6	58.6	66.2	60.2	83.6	91.8	133.7	128.4	166.8	120.0	102.5	78.9	1162.4
Nemuro	35.7	27.1	64.6	75.5	96.3	95.4	96.1	106.6	147.3	98.8	82.4	84.0	977.2
Bonin	112.2	85.6	109.8	117.9	216.3	114.2	101.0	188.8	137.6	123.0	141.1	136.2	1694.7

Table VIII.—Number of Days with Precipitation

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Taiho' u	16.3	16.7	17.3	14.8	16.1	15.2	13.4	15.2	14.4	15.0	16.1	16.4	186.9
Fukuoka	16.7	14.7	15.7	14.0	11.9	15.4	14.1	11.2	14.4	11.4	12.0	16.0	167.6
Kagoshima ...	13.9	13.1	16.1	14.9	14.3	18.7	16.6	14.9	14.6	11.5	10.1	12.8	170.9
Hiroshima.....	11.1	10.0	13.2	13.2	11.5	14.0	12.7	9.9	13.6	9.3	9.1	9.1	126.9
Osaka	8.0	9.6	13.1	13.4	12.5	14.8	12.6	10.1	14.3	10.8	9.8	8.2	139.1
Nagoya	9.6	8.0	12.7	12.7	12.4	15.1	14.8	12.2	15.8	11.6	10.2	9.4	145.5
Kanazawa.....	26.7	22.6	21.0	15.6	14.1	18.3	15.3	12.0	15.8	17.5	20.8	23.8	223.4
Tokyo	7.4	8.2	13.4	14.2	14.0	15.7	14.4	12.6	16.7	14.4	10.0	6.6	117.9
Niigata	21.7	22.9	21.4	15.2	13.9	14.3	14.6	11.4	17.0	19.0	21.9	27.1	226.4
Ishinomaki ...	10.4	10.3	12.3	12.1	12.6	13.9	15.6	13.8	15.5	14.0	11.5	10.9	152.9
Hakodate	21.0	17.7	17.9	11.8	12.9	12.9	13.9	12.7	16.4	15.2	18.8	21.6	192.7
Nemuro	11.7	9.7	12.1	12.1	13.0	14.5	14.8	14.6	15.3	13.4	12.9	12.7	156.7
Bonin	17.1	15.6	16.0	14.5	14.8	11.2	14.0	17.2	16.9	18.4	17.3	17.1	193.6

Frost.—The invasion of cold wind from the Asiatic continent often causes killing frost, which frequently inflicts heavy damage on young mulberry leaves, and hence to spring sericulture. The following is the record in various sericultural centres:—

Average time	As occurred last
Nagoya	Apr. 12
Gifu	May 13, 1902
Matsumoto ...	.. 19, 1893
Nagano .....	.. 25, 1907, 1911, 1912, 1917
Maebashi .....	.. 30, 1891
Kumagai .....	.. 13, 1902
Fukushima ...	.. 16, 1917
	.. 25, 1895, 1912

Humidity.—From her geographical position the climate of Japan is very moist, and this fact is responsible for the southerly wind in summer that travels with the Black Current and the northerly wind which blows with the Tsushima Current.

Average Humidity (Per Cent)

Observatory	Jan.	Apr.	Jul.	Oct.	year	min.	Observatory	Jan.	Apr.	Jul.	Oct.	year	min.
Taihoku ...	83	83	78	81	82	29	Tokyo	64	73	83	80	74	8
Kumamoto	78	77	82	79	79	18	Matsumoto	79	70	80	83	77	17
Fukushima	74	67	80	82	76	12	Niigata ...	3	76	83	79	80	20
Kanazawa	80	74	82	79	78	19	Hakodate .	77	72	86	74	77	19
Kure	71	72	79	74	74	22	Sapporo ..	80	72	84	79	79	8
Osaka	72	72	77	76	74	16	Fusan	50	66	82	64	65	5
Nagoya ...	75	72	78	78	75	21	Seoul	68	67	80	73	71	17

For reasons already given, Japan is one of the rainiest regions in the world, the average record of rainfalls ranging from 700 m.m. in Saghalien and Northwestern Korea and 3,312 m.m. in Hachijo Island off Izu Peninsula. In Southern and Northern Formosa, Luchu Is., and on the southeastern and Japan Sea coasts of Japan proper, it is generally above 2,000 m.m. In the middle part of the Inland Sea coast, the inland basins in Shinano and other prefectures the gauge registers below 1,200 m.m. The Pacific coast of Northern Japan has generally little rain.

Average Precipitation (m.m.)

Observatory	Jan.	Apr.	July	Oct.	Yearly total	Max. per day
Taihoku	88	135	228	133	2,072	287
Kumamoto	65	163	273	113	1,789	187
Kure	59	150	199	111	1,457	163
Osaka	49	142	146	132	1,370	175
Nagoya	58	167	190	154	1,721	240
Tokyo	56	131	140	191	1,561	194
Matsumoto	46	89	132	124	1,162	156
Fukushima	52	85	150	166	2,028	165
Kanazawa	277	166	205	201	2,548	156
Hakodate	63	69	131	121	1,157	147
Niigata	192	107	160	155	1,811	133
Sapporo	82	55	88	106	1,012	124
Fusan	53	162	275	72	1,419	251
Seoul	34	85	326	39	1,263	355

As a natural consequence of the heavy precipitation of rain or snow, the number of sunny days is comparatively small. Rain or snow claims 150 days on an average, the remaining 215 days being fair. Thus Japan may approximately be said to have, in a year, 4 sunny days for every 3 days of rain or snow. The Pescadores (94.5 days) and Kamo (245.3 days) are the two extremes. In Korea and Western Formosa wet days do not exceed 120 while in Japan proper they seldom fall below the figures. The Japan Sea board of Honshu and Luchu, Bonin and Kurile Islands have more than 200 wet days. In the first-named region gloomy weather prevails in winter months (Nov. to Feb.) over 23 days of the month being rainy or snow.

Average No. of Wet Days

Observatory	Jan.	Apr.	July	Oct.	Yearly total
Taihoku	16.0	14.9	14.5	15.1	188.9
Kumamoto	12.4	13.8	15.8	10.4	155.3
Kure	8.5	12.3	11.6	9.0	125.4
Osaka	8.9	13.5	12.3	10.7	139.2
Nagoya	9.4	12.9	14.6	11.7	145.3
Tokyo	7.3	14.2	14.6	14.3	147.2
Matsumoto	11.6	12.1	15.6	12.5	148.1
Fukushima	14.3	11.8	16.8	13.3	167.6
Kanazawa	26.8	15.5	15.3	17.6	224.1
Niigata	27.7	15.3	14.2	19.1	226.9
Hakodate	20.7	11.9	13.5	15.1	192.1
Sapporo	20.1	12.5	12.7	16.8	192.7
Fusan	6.3	10.0	13.9	7.5	106.7
Seoul	7.6	9.7	14.9	7.2	113.2

Japan has two wettest seasons, one from the middle of June to the beginning of July, and the other from the beginning of September to the beginning of October. The former called "bai-u" or "tsuyu" is especially marked on the Pacific coast or Southern Japan, due to the appearance of low pressure areas in the Yangtze valley of China which travel north-eastward. It occasions a long spell of drizzling rain. The latter is caused by the low atmospheric pressure that originates from the South Sea and is characterised by heavy precipitation.

FAUNA AND FLORA

Japan is very rich in fauna and flora, owing to the fact that (1) the land is very much elongated from north to south, (2) has highly indented coasts, and (3) owing to the existence of several high mountains. Species found in the northern parts of Japan (i.e. Saghalien, Kurile Islands, Hokkaido) and Korea have much in common with those of Manchuria, Siberia and Europe, while the southern parts (Formosa, Luchu Islands and Bonin Island) compare with South China, Oceania and India.

FAUNA

Number of species found in Japan and those peculiar to or specially conspicuous in the country are as follows:—

Mammals	240 species.
Peculiar to Japan.....	180 species.

Ex. Japanese ape (*Macacus speciosus*); Chichibu bat (*Synotis darjilingensis*); mountain mole (*Urotrichus talpoides*); Japanese weasel (*Putorius itatsi*); Erx weasel (*P. erminea*); Japanese fox (*Canis japonicus*); Japanese deer (*Cervus sika*); Japanese horse (*Lepus brachyrus*); flying-squirrel (*Pteromys momonga*); Japanese bear (*Ursus japonicus*); Korean tiger (*Felis tigris*); sea-otter (*Enhydra lutris*); fur-seal (*Otaria ursina*); wild boar (*Sus leucomystax*); Formosan ant-eater (*Manis pentadactyla*).

Birds number over 720 species, of which three-fourths are

palearctic region species, and one-fourth are either Ethiopian region types or forms peculiar to Japan.

Ex. Japanese owl (*Ninox japonica*, *Scops japonicus*); Tsushima wood-pecker (*Thriponax richardsi*); red wood-pecker (*Dendrocopus japonicus*); blue wood-pecker (*Gecinus awokera*); Japanese lark (*Alauda japonica*); Japanese robin (*Erithacus akahige*); black-back wagtail (*Motacilla japonica*); Japanese crane (*Grus japonensis*); Japanese bush-warbler (*Cettia cantans*); Japanese swan (*Cygnus bewicki*); albatross (*Diomedea brachyura*).

Reptiles 90 species.

Ex. Japanese snapping-turtle (*Trionyx japonicus*); stone tortoise (*Emys japonica*); blue-sea-turtle (*Chelonia viridis*); Japanese gecko (*Gecko japonicus*); Ryukyu three-parts-tail snake (*Trimeresurus riukinanus*).

Amphibians 80 species.

Ex. Japanese bull-frog (*Bufo japonicus*); Japanese tree-frog (*Hyla japonica*); Japanese frog (*Rana japonica*); giant salamander (*Megalobatrachus maximus*); Hakone salamander (*Onychodactylus japonicus*).

Fishes 1,230 species.

Ex. Japanese perch-sea-wolf (*Percalabrax japonicus*); Pelor japonicus; *Monocentris japonicus*; *Acipenser mikadot*; *Petromyzon fluviatilis*; Japanese tunny (*Thynnus sibi*); *Samma* (*Scombrosox saira*); Japanese eel (*Augilla japonica*); Japanese sharks (*Carcharias japonicus*; *Pristiophorus japonicus*).

Insects over 40,000 species.

Dragon-flies over 160 species.

Ants over 180 species.

Cicadae 100 species.

Butterflies about 450 species.

Besides those stated above there are spiders (over 1000 sp.), shrimps (*Pallinurus japonicus*), crabs (of which *Macrocheir japonicus* is the greatest crustacean in the world), hermit crabs (about 70 sp.), squids (about 30 sp.), shell-fishes or mollusca (over 3,000 sp.), cuttle-fishes and octopi (72 sp.), sea-squirts, sea-mats, worms, star-fishes, sea-urchins, sea-cucumbers, wheel animalcules, small and large jelly-fishes, sea anemones, sponges, and others, all consisting of numbers of species.

FLORA

Owing to the peculiar topographical condition the flora of Japanese Empire consists of several distinct groups, and at present nearly 10,000 flowering plants and ferns are known, with possibility of new addition through further study. In point of fact no small number of new genera have already been established by Japanese botanists, and of these may be mentioned *Taiwania*, Hayata (*Conifer*), *Chosenia*, Nakai (*Salicaceae*), *Hanabusaya*, Nakai (*Campanulaceae*), *Mitrastemon*, Makino (*Rafflesiaceae*), *Hakonechloa*, Makino (*Gramineae*), *Matsumurella*, Makino (*Labiatae*), etc., etc. The names of Dr. T. Makino and Dr. T. Nakai stand out prominent as regards the new discovery, the latter as specialist in Korean flora having enriched

it with 190 genera and some 440 species and varieties, while the former, who chiefly devotes himself to the main island, is responsible for some new genera and several hundreds of new species.

So far known the flora of Japan consists of about 17,987 species classified as follows:—

Flowering plants	About 9,000	species
Ferns	700	"
Moss and Hepatic.....	2,000	"
Mushrooms	3,500	"
Lichens	700	"
Sea-weeds (Marine algae).....	691	"
Fresh-water algae	323	"
Slime molds (Mycetozoa).....	173	"

Speaking of some common familiar plants there grow in Japan some 130 species and varieties of violets, according to Dr. T. Nakai. About 30 species of primroses are known to grow in the alpine districts. *Primula Sieboldii* is growing wild even near Tokyo and is preserved as natural monument. *P. japonica* was introduced into England as early as 1863 and was called "Queen of Primroses" by Robert Fortune.

Trees and shrubs number over 600 species. To mention those that are noted for ornament or use or both there are Japanese mountain cherries growing wild everywhere, of which *Prunus serrata* var *spontanea* is most common. In high altitude are found *P. nipponica*, *P. Maximoviczii*, *P. incisa*, etc., the last growing abundantly at the foot of Mt. Fuji and flowering in May. Of conifers we have *Cryptomeria japonica* and *Chamaecyparis obtusa*, two of the most important timber and ornamental trees; then among the *Pinus* *P. Thunbergii* and *P. densiflora* may be mentioned. The quercus family is represented by nine important species, while of *Rhododendron* (*Azalea*) Japan boasts about 50 species with the garden variety numbering several hundreds. *R. Komiyamae* is a new addition recently found near Mt. Fuji. An interesting species belonging to this family is *Teusiophyllum Tanakae*, Maximovicz that grows on mountain rocks at some limited localities in Middle Japan, it being a dwarfish tree with scaly green leaves and white tube-shaped flowers. As regards Willows our salicologists say that the last enumeration as to number of existing species should be reserved for future, but so far some sixty species have been identified. Bamboos are counted by over 50 species in Japan proper, exclusive of numerous garden varieties.

Timber trees extant number over 100 but those that are valuable for wood do not exceed thirty species or so (See Chapter on Forestry).

Ornamental plants, wild or cultivated, count about one hundred, according to the list prepared by the Garden Committee of the Meiji Shrine erected in Tokyo in 1920. The list includes 34 evergreen trees, 41 deciduous trees, 7 evergreen and 9 deciduous shrubs, and 10 herbs.

Special plants were first placed under protection of law in 1920, and 137 are now on the list.

Publishing organs consist of the Imperial University Bulletin, The Tokyo Botanical Magazine and the Journal of Japanese

Botany, the latter edited by Dr. T. Makino.

Noted Specialists:—In Systematic botany there is a long list of distinguished men, as Dr. J. Matsumura, Dr. T. Makino, Dr. Yabe (noted for his South Manchuria and North China flora), Dr. B. Hayata (for Formosan flora), Dr. T. Nakai (for Korean flora), Dr. Y. Kudo (for Hokkaido flora), Dr. K. Miyabe (for Hokkaido and South Saghalien flora), Dr. K. Okamura (specializing in marine algae), Dr. S. Okamura (in mosses and liverwort), Dr. S. Kawamura (fungi), Drs. R. Nakazawa and K. Saito (yeasts), Mr. K. Minakata (slime molds), Dr. Y. Asahina (lichens).

Then Pathology is represented by Drs. K. Miyabe, K. Shirai, and M. Hori; Phylogeny by Dr. S. Ikeno; Cytology and Anatomy by Dr. K. Fujii, Dr. Y. Kuwata, etc.; Physiology by Drs. K. Shibata, H. Kooriba, H. Hattori, S. Kusano.

CHAPTER II

OUTLINE OF JAPANESE HISTORY

ANCIENT TIMES

Mythical Period.—The "age of gods" preceding the accession of the First Emperor **Jimmu** is, like the corresponding period in Greek history, made up of strange tales of the gods and demi-gods. In this age flourished the Sun-Goddess, or **Amaterasu O-mikami**, enshrined in the Great Temple of Ise, her brother the Impetuous **Susanoo-no-mikoto** to whom the Great Temple of Izumo is dedicated, and all the host of "milliard deities."

Legendary Period.—From the accession of the first Mikado, **Jimmu Tenno**, B. C. 660, to about the reign of **Yuryaku Tenno**, (A.D. 457-480) the Imperial House was chiefly employed, according to the time honored legends and traditions, in subjugating the northeastern region still held by the earlier inhabitants the **Ainus**, and **Kyushu** which was probably in close touch with the kingdoms in the Korean Peninsula. In the dim light of this prehistoric period move such heroic figures as **Yamatodake-no-mikoto** who was sent to subjugate the regions at the north and the south, while the name of the Empress **Jingo** stands conspicuous as the conqueror of the hostile Korean kingdoms. Her grand counsellor, **Takenouchi-no-Sukune**, is our Methuselah, being recorded to have attained the age of 300.

Introduction of Buddhism and Establishment of Capital at Kyoto.—We begin to tread on surer ground from the reign of **Kimmei Tenno** when, with the introduction of Buddhism and Chinese classics through Korea, Japan gradually advanced toward civilization through contact with the more enlightened Korea, and through her with China. The arrival of this exotic religion occasioned a fierce internal discord between the rival clans of the **Moriya** and the **Soga**, and the latter, which was in favor of adopting it, came out triumphant. The **Soga** family assumed the real power of the country, assassinated a Mikado who was unfriendly to them, and through their encouragement and that of Prince **Shotoku**, Buddhism spread both in the Court and among the masses. This caused a marked rise of Japanese art, principally of a religious character, especially in the reign of the first Empress in Japan, i.e., **Suiko** (593-628.) The **Horyuji** temple in Yamato, built more than 1300 years ago and the oldest wooden structure existing in the world, is one of the temples erected at that time. In 607 A.D. Japan first sent an embassy to China, then under the **Tung** dynasty. The arrogance of the **Soga** invited their downfall in the reign of **Tenchi Tenno**, who, before accession to the Throne, had headed the faction that destroyed the family. The Court then recovered its supreme authority. Meanwhile **Hokkaido** was subdued and the victorious arm was even extended to northern Manchuria. On the other hand Japan lost the suzerainty over Korea. The reign of **Kotoku**

Tenno, (645-654), the predecessor of **Tenchi**, is remarkable for having thoroughly remodelled the administrative system on that of China, and for having introduced the Chinese custom of "year name." **Gemmyo Tenno** (708-715), the 5th Empress of Japan, removed the seat of the Court, which had been shifting its seat from one place to another, to Nara, where for about seventy years art and culture burst into splendor seldom equalled in some respects, as may be judged from the treasures, over 3000 articles in all, kept in the storehouse of **Shoso-in**, Nara, and comprising the articles that were used by **Shomu Tenno** and presented to the temple after his death in 756. The first Japanese book extant, **Kojiki**, and first Japanese anthology, **Manyo-shu**, were the production of the Nara period. Buddhism retained its great influence over the Court to such an extent that an infatuated Empress **Koken Tenno** (749-758) even contemplated elevating her favorite monk **Dokyo** to the Throne, though from this fate Japan was saved by the fearless opposition of **Wake-no-Kiyomaro**.

Court at Kyoto.—Established as the Imperial capital in 794 Kyoto was the center of power and culture for about 400 years till 1192 when **Yoritomo** established at **Kamakura** the Shogun government, and reduced the position of the Imperial city to one of nominal importance. Meanwhile the actual power at the Imperial Court had passed to the ministerial family of **Fujiwara** which was founded by **Kamatari**, **Tenchi Tenno's** righthand man in the plot against the **Soga** family. Art and literature made a striking development. The Court gave itself up to refined amusement, leaving the sterner duty of maintaining peace to warrior classes of which **Taira**, or **Heike**, and the **Minamoto**, or **Genji** family came to the front. The period witnessed the invention of the "kana" scripts, an innovation of immense educational importance as it helped the spread of learning among the people, and made possible the appearance of such classics as **Genji Monogatari** by **Murasaki Shikibu**, **Makuranososhi** by **Seishonagon**, **Yeigwa Monogatari** by **Akazome-emon**, and others, all maids of honor. **Ki-no-tsurayuki** who compiled another anthology, **Kokin-shu**, furnished a model of the mixed style of Chinese characters and "kana," in his classic diary, **Tosa-nikki**. The custom of sending students to China for study had already been discontinued.

The effeminacy of the ruling class at the Court was followed by the rise of the military family of **Heike** which overthrew its rival the **Genji** and assumed the administrative authority as successors to the **Fujiwara**. It proved a very short ascendancy of only about 20 years, for living amidst the enervating atmosphere of Kyoto the original warlike spirit was soon sapped, and the **Heike** fell an easy prey before the fierce attack of the rough and rude followers of the **Genji** who had been watching their opportunity in the provinces. The battles fought between the rival armies near Kobe, Yashima and Dannoura, furnish romantic chapters in the history of Japan.

Period of Kamakura.—**Yoritomo** brought the whole of Japan under complete subjugation, not sparing even his own brother **Yoshitsune** who had destroyed the **Heike** clan. Around **Kamakura** grew up culture of a severer type agreeable to the simpler taste of the warrior classes. The power soon passed to the **Hojo** family from which came the wife of **Yoritomo**, and for about a

century this humbler family wielded the supreme authority as Shikken, or Regents, to the boy Shoguns selected from among the children of courtiers at Kyoto, and ruled the country in peace and prosperity. The era is memorable for the arrival first in 1274 and next in 1281 of the Mongol armada, which was, however, annihilated with the help of the "divine wind" or typhoons in modern parlance.

The Imperial Court that had long been chafing under the humiliating treatment of military rulers repeatedly attempted to recover its legitimate authority, and an abortive rising in 1221 resulted in the wholesale exile of the three retired Tenno. A similar attempt by **Godaigo Tenno** (1319-1399) fared no better at first, but by this time the maladministration of the Hojo had very much alienated public support. **Kusunoki Masashige** first raised the anti-Hojo banner near Kyoto and he was followed by **Nitta Yoshisada**, and lastly **Ashikaga Takauji**. Kamakura was sacked and taken by Nitta, and the Hojo regency ceased to exist. Godaigo, who had been exiled to Oki, reascended the throne and the restoration of the Imperial power was consummated, but only for a short while. The courtiers and favorites claimed the lion's share in the distribution of the vast domains hitherto held by the Hojo, and there was only a little left to be given to those generals and their followers who at the cost of their lives and blood pulled down the Hojo. **Takauji** read the signs of the times, raised the banner of rebellion at Kamakura and set up one of the Imperial princes as his own Emperor. For half a century Japan had two Imperial Courts, the Southern Court, which was supported by the followers of the unfortunate Godaigo, and the Northern Court backed by the **Ashikaga**. **Kusunoki**, **Nitta**, **Kitabatake**, and others who remained faithful to the Southern Court were killed in one battle after another, till the rival courts were fused in 1392.

Ashikaga Shogunate.—The rule of the **Ashikaga** shogunate established at Kyoto was never a strong one and the powerful barons in the provinces were practically left a free hand. As regards matters of taste and refinement, however, this period made a very valuable contribution to the history of civilization in Japan. Thus it was in the time of the 8th **Shogun Yoshimasa** (1436-90) that the art of tea ceremonial, the lyric drama called **No**, and other arts were originated in this country. The period is also memorable for having revived trade with China, then under the Sung dynasty, and witnessed the visit of many Japanese artists to and learned priests from the opposite shore. Japanese freebooters also ventured out in their frail craft and spread terror along the coast of Korea and China. The arrival of the first Portuguese ship in 1541, of the Spaniards not long after, and of **Francis Xavier**, a Jesuit missionary in 1549 are noteworthy incidents in our history.

For more than a century, from about the middle of the 15th century, a state of anarchy prevailed, the shogunate having completely lost its prestige. By force of arms and by crafty schemes all the ambitious barons were bent on annexing the domains of weaker neighbors. One of them, **Oda Nobunaga**, of Owari, succeeded in subjugating all the neighborhood, and the way to Kyoto thus cleared, he was able to advance to the Imperial capital, which must have been left in a state of utter desolation in consequence of repeated battles fought in and about it. His

victorious troops conquered in the east and the west. In this expedition of territorial expansion **Hideyoshi**, one of his generals who had entered his service as a mere menial retainer, distinguished himself over all the veteran generals of **Nobunaga**. When **Nobunaga** was killed by his general **Mitsuhide** in 1582, **Hideyoshi** came back in a hurry, revenged his lord upon traitor in a pitched battle fought near **Kyoto**, and by promptly forestalling all the other generals of the unfortunate **Nobunaga**, made himself the master of the grand edifice nearly completed by his chief.

Nobunaga had even adopted the policy of encouragement to Christianity, chiefly to check the rampant tendency of Buddhist priests against whom he had led a crusade. **Tokugawa Iyeyasu**, the lord of **Mikawa**, **Totomi** and **Suruga**, was an ally of **Nobunaga**, but with the assumption of power by **Hideyoshi** to the exclusion of **Nobunaga**'s two sons, **Iyeyasu** adopted an attitude of neutrality, and next one of hostility when one of the two sons, for having sided with an enemy of **Hideyoshi**, fled to **Iyeyasu**. The latter took up the cause of the refugee, fought with the overwhelming host of **Hideyoshi**, and routed his advance army. **Hideyoshi** judged it wiser to win over **Iyeyasu** by peaceful means instead of by war, and the two houses became reconciled.

Hideyoshi brought the whole country under his sway, built a castle at **Osaka**, and then another at **Momoyama** at **Fushimi**, besides a magnificent mansion at **Kyoto**. His love of splendor and display was reflected on the art of this period, and painting, architecture, and so forth developed a bold style.

Hideyoshi next turned his attention to the ambitious project of subduing China, and in 1592 the invading army landed in Korea. For seven years, with the interruption of three intervening years, the invaders routed the Koreans and their allies the Chinese army. The expedition, however, was rendered abortive by the death of **Hideyoshi** in 1598.

Tokugawa Shogunate.—**Iyeyasu** was now the most powerful man, for **Hideyoshi**'s son **Hideyori** at **Osaka** was still a minor. The jealousy of a number of the followers of **Osaka** brought about in 1600 the great battle of **Sekigahara** between them and **Iyeyasu** in which the two houses of **Mori** and **Shimazu** that sided with the former fared hard. **Iyeyasu**'s victory further strengthened the position of the **Tokugawa** family, which then provoked war upon **Osaka** and the latter fell in 1615.

Japan enjoyed on the whole peace and prosperity during the shogunate of **Tokugawa** that lasted over two centuries and a half. Christianity that had been tabooed by **Hideyoshi** was at first tolerated, and intercourse with foreign countries was encouraged. Thus in 1610 the Spaniards who were wrecked on the coast of Japan were sent to Mexico by a Japanese ship, while in 1614 **Date Masamune**, the lord of **Sendai**, dispatched **Hasekura Rokuemon** to Rome to inspect the state of affairs there. This liberal policy was soon superseded by one of prohibition owing to the rivalry between the Dutch and the Portuguese traders. The rising of the Christians into rebellion at **Amakusa** in 1637 was followed by a severer policy against the religion and foreign commerce, exception being made only in favor of the Dutch and the Chinese. Japan remained secluded till the arrival of Commodore **Perry**'s mission in 1853 to demand the opening

of the country for commerce.

Learning was encouraged by the shogunate, chiefly to check the war-like propensity of the daimyos. Indirectly it fostered historical and literary research by our scholars and it is interesting to note these researches brought home to their mind the abnormal state into which the executive power of the country had fallen and especially to the encroachment of the military classes on the sovereignty of the Court. Meanwhile the extravagance of the successive shoguns highly impaired their credit, while the arrival of foreign missions one after the other in quick succession in the early 19th century, demanding the conclusion of treaties of commerce, further tended to reveal their internal decay. Chiefly to gain time, the shogunate applied to the Court for permission to open the country and thus involuntarily placed itself under the direction of the legitimate rulers. The Court then ordered the expulsion of the foreign missions. It was a highly irresponsible decision, but the Court had been long estranged from active politics and was moreover inclined to obstruct and annoy the shogunate out of spite. It was in such peculiar circumstances that the sentiment of loyalty to the legitimate rulers became strangely associated with the anti-foreign policy, and gave rise to the *sonno-joi* (loyalty to the Court and expulsion of the foreigners) agitation, the slogan that swept over the whole country at that time. But the foreign missions would no longer accept delay, so that the senior counsellor of the shogunate of the day, *Ii-Kamon-no-Kami*, signed tentative treaties in 1858, and for the resolute step he took he was assassinated by a band of the *sonno-joi* upholders. The bigoted and dangerous cause was considered sacred by the general public, and even some powerful daimyos, as Choshu and Satsuma, who had a spite against the Tokugawa from one cause or another, tried to carry out the *joi* order to the letter, and at slight provocation or none at all killed or injured foreigners or fired upon foreign warships. The Government was in utter dismay, for the foreign representatives made on every such occasion a strong demand for reparation. These repeated troubles were too great for the impotent shogunate to settle, and at last the shogun *Keiki*, the last of the illustrious line, surrendered the vicarious power of ruling the country, for he was enlightened enough to perceive the trend of the times, and thus the Imperial Court recovered its full prerogative which had been kept in abeyance for about ten centuries. This memorable event was not consummated without some bloodshed, through an armed struggle, fortunately of short duration, between a section of the misguided partisans of the Tokugawa and the Imperial adherents.

Meanwhile those young patriots who had so zealously taken up the bigoted and dangerous cause were disillusioned of their fatal error from the knowledge though scanty, which they obtained either by staying abroad a short while, as Ito, Inouye and some others of the Choshu clan did, or by some indirect means. Their attitude was completely changed, for it now was "Learn of foreigners where they are strong and remedy our defects." By the time the shogunate had fallen the *joi* agitation had practically disappeared, in fact most of the agitators were soon converted into radical reformers.

MODERN JAPAN

The 45 years of the reign of the late Emperor Meiji will forever remain in the history of Japan as the most illustrious epoch in the development of the nation, besides supplying to the history of human progress a memorable chapter, teaching how a nation, even when placed under serious disadvantage, may, by dint of untiring diligence and patriotic endeavors and perseverance, succeed in pushing ahead the prosperity of the nation and in expanding its prestige and credit. Fifty years ago Japan was a terra incognita or at best a geographical name, but today she is a respected member of the great comity of nations.

The Meiji government was very fortunate in that it was guided from the outset by such able court nobles as Iwakura and Sanjo and by the young samurai of progressive ideas and burning patriotism sent by the awakened feudal clans of Satsuma, Choshu, Tosa and Saga clans that were chiefly instrumental in overthrowing the Tokugawa shogunate. Among such young samurai were Yamagata, Okubo, Kido, Saigo, Itagaki, Soejima, and Goto. It was fortunate too that they had sprung from comparatively humble ranks in their respective classes, for they had no particular compunction in doing away with old traditions and ancient manners. The first thing which they advised the boy Emperor, who was only 16 when he ascended the Throne, to do was to swear an oath of five articles and to proclaim it to the public, it running to this effect; "All governmental affairs shall be decided by public discussions; both rulers and ruled shall unite for the advancement of the national interests; all base customs of former times shall be abolished; knowledge shall be sought for far and wide." Next year the Imperial court was removed to Tokyo.

The task which these young Councillors of State had to undertake was really herculean. First they had to reduce the internal administration to some kind of unity and order, and to this end they persuaded their feudal lords to follow the example of the Shogunate and to surrender their fiefs to the Court. The chieftains did not hesitate to comply and early in 1869 they, under joint signatures, memorialized the Court for permission to surrender their ancient trusts. All the other fiefs, for there were no less than 262 such principalities large and small throughout the land, exclusive of the shogunate's domains, vied with each other in submitting similar memorials, so that in less than six months the whole territory was brought under the Imperial government. No sooner was the centralization effected than grave troubles, both domestic and foreign, and these reacting upon each other, demanded the attention of the Government. The domestic troubles involved the country in a series of civil wars, as described later.

Foreign Troubles.—When the Imperial Government was restored, the news was duly conveyed to Korea with the idea of reminding the latter to send a congratulatory envoy as had been invariably done whenever a new Shogun was installed, but which courtesy had been neglected by Korea in the latter days of the Tokugawa. While this question of Korean discourtesy was still pending the Iwakura mission started for the West in Oct. 1871 with the object of having the one-sided Treaties of Commerce revised the following year, as expressly stated in

the documents. When the mission returned in Sept. '73, humored at most places but sincerely advised at a few others to effect first of all a thorough internal reform before approaching the Powers to revise the Treaties, Iwakura, Okubo, Kido, Ito and others that formed the mission found their colleagues fully determined to send a punitive expedition to Korea, if the returning ministers approved. The latter stoutly opposed the decision, and the first serious split in the new Government was the result, Saigo, Soejima, Itagaki and other Ministers resigning office. The other foreign complications in which the new Government was involved were the expedition to Formosa in 1874 for chastising the natives who had murdered the shipwrecked fishermen of Luchu, for China had tried to disown responsibility on the ground that the island was outside her control; the protracted negotiation with Russia about the delimitation of boundary in Saghalien, resulting in the relinquishment of our claim to the island in exchange for the absolute control of the Kuriles, in 1875; definite recognition by China, through President Grant's intercession, of Japan's right over Luchu which had been feudatory to the House of Shimazu for centuries but which had secretly maintained a relation of vassalage to China.

Civil Wars.—The ministerial split of 1873 soon brought two civil wars as a sequel of the Korean question. The first broke out in 1874 at Saga under the ex-Minister of Justice Eto, but was fortunately suppressed in a few weeks, but the other that was started in Feb. 1877 in Kagoshima by the faithful adherents of the elder Saigo proved a rebellion of the gravest character, for it took some seven months before the Imperial Government could subdue the rebels who, led by men that held high office in the Imperial army, offered desperate resistance. The rebellion was the most formidable crisis which the Meiji Government had to encounter at home, for since the memorable Ministerial dissension the whole country had been seething with discontent and Saigo, who was a simple-mannered soldier of strong personal magnetism, had numerous friends in many parts of the country ready to rise and take up his cause at the first opportunity. The rebellion served as an occasion for demonstrating most emphatically that the much despised son of farmers, if properly disciplined, could make as good soldiers as the young samurai who formed the bulk of Saigo's army. There occurred minor uprisings shortly before Saigo's rebellion, at Kumamoto, Akitsuki and Hagi, but they were merely explosions of those who were roused to see the time honored manners and customs ruthlessly superseded by the foreign and "barbarous" ways. The suppression of the rebellion, ended in establishing on a firm basis the prestige of the Meiji Government and bringing the country into unity, but the cost paid for it was very dear, not only on account of the vast disbursements, over ¥40 millions, but in the loss of hundreds of men of uncommon ability and usefulness. The great Okubo was assassinated by a number of Saigo's adherents in the year following the subjugation.

Administrative Reform and Political Agitation.—The whole energy of the Government was now bent upon pushing industries and projects for promoting general prosperity, while at the same time steps were taken for reorganizing the administrative system after the Western pattern. It is interesting to note that the popular activity at this period was chiefly political and was aimed

at the speedy establishment of representative government, and equally interesting is the fact that the movement was started by ex-civilian Ministers, such as Itagaki, Soejima and Goto, and it looked as if the Korean expeditionists had changed their tactics with the object of harassing their former colleagues in power. The agitation lasted with growing intensity till 1881 when an Imperial Edict promising the creation of a National Assembly ten years later was issued.

The opening of the Diet in 1890 occasioned between Government and the House prolonged contests that were bitter and fierce. The members returned were all serious politicians of strong conviction and staunch views who had staked all they had in promoting the cause of constitutional movement. They were most of them veterans in speech and debate, and completely out-argued Cabinet ministers and their lieutenants on the platform, and out-voted them too, for it was significant as a sign of the times that ministerial candidates were held in utter contempt by the general public and had little chance of getting into the House. When the attempts made by the bureaucrats to form their own party in the House failed, they next adopted the conciliatory policy of admitting one or another leader of a predominant party into the Cabinet but of course this paltering measure could not long keep the opposition in silence.

At last in 1888 the retiring Premier Ito took a heroic step; he recommended Okuma and Itagaki, leaders of the amalgamated Opposition, as his successors. The result was the formation of the Okuma-Itagaki Ministry in which all the portfolios, with the exception of the army and navy, were held by leading party men. It was the first though incomplete party cabinet in Japan. Unfortunately the Cabinet was short-lived, for obsessed with a sense of security from the attack of the Opposition numerically quite contemptible, the followers of Okuma and those of Itagaki quarrelled over the division of the spoils of their combined victory. At last the Itagaki contingent struck their tents and withdrew, and thus the first attempt towards party government collapsed miserably. From that time till the fall of the last bureaucratic ministry headed by Terauchi, Japanese politics was literally a game played by the bureaucrats, the Seiyu-kai and the Kensei-kai with the Genro standing by as arbiters. (For further details, see the Chapter on Politics.)

Revision of Treaties

It took about half a century before Japan succeeded in getting revised the one-sided Treaties concluded by the Tokugawa Government in 1858, containing the humiliating clause of extra-territoriality and restriction of customs duty to the very low level of 5 per cent. This grave problem demanded most strenuous efforts from both Government and people, and it must be said that the natural though ambitious aspiration exerted a salutary influence in hastening the internal improvement, especially as regards judiciary, though thirty years of untiring investigations and deliberation had to pass before Japan could complete the codification of all the important laws on a Western model with the assistance of a number of foreign experts.

Between 1882 and 1892, when the treaty was revised first of all with Great Britain, the Foreign Office changed its Minister

no less than five times, not only because of the strong opposition offered by the Treaty Powers to Japan's proposals but because, in its later stage when the substance of the draft had leaked out, public opinion began to object violently to the clause concerning the mixed tribunals with foreign judges as assessors, though this clause was gradually attenuated in the Okuma draft in its application and was intended at last to cover only the Supreme Court. Still the public agitation was by no means appeased; on the contrary, led by a section of those demagogues who had long training as agitators in upholding the constitution movement, the cry against the mixed court clause grew in intensity in the House and outside of it. These stalwarts declared that Japan could not submit to the humiliating treatment Egypt and some other semi-independent countries had; they were well contented to do without such shameful revision. At the same time they argued that Japan must guard her interest reserved by the existing Treaties, especially about restrictions of freedom of residence and travel in the interior. They even passed a resolution to that effect in the House, the Diet having been inaugurated in the meanwhile, and it invited its dissolution. It was to the lasting credit of the late Count Mutsu that a revised treaty was signed at London in 1894 and the example set by Britain was soon followed by America and other countries, and Japan thus obtained a treaty for the first time on a basis of equality. However it was not till 1911 that complete tariff autonomy was secured.

National Expansion

While Japan was bent upon the stupendous task of reorganizing her institutions on a Western model and introducing the important innovations of modern civilization, her two nearest neighbors, Korea and China, were still stubbornly wedded to their old effete routine, hating to open the countries to foreign intercourse and generally despising foreign ways. They were too haughty and self-important to perceive how greedily the aggressive Powers of the West were watching them, ready to pounce at the first favorable opportunity. China was the worse sinner of the two as regards this attitude of apathy and defencelessness, for Korea, though an independent kingdom, contented herself with being a slavish imitator of her great neighbor, allowing the latter to assume the relation of a suzerain. Japan concluded a treaty of commerce with Korea in 1876, for she wanted the latter to be sufficiently strong to protect herself against foreign aggression. In Korea Japan stood for progress and China for reactionary interest; Korea herself was divided by two native rival factions which kept the country in interminable disturbances. These ceaseless troubles at last involved their two patrons in open war in 1894.

Sino-Japanese War.—Japan made short work of the enemy's resistance on land and sea, drove the Chinese troops from one position to another in Manchuria, and soon the way was open for her army to march on Peking. Another detachment, in co-operation with the fleet, reduced Weihaiwei in Shantung and moreover annihilated the once proud Northern fleet. China sued for peace, and the result was the Treaty of Shimonoseki concluded in April 1895, by which China agreed (1) to the complete

independence of Korea, (2) to cede the Liaotung peninsula and littoral and (3) Formosa and the Pescadores; (4) to pay an indemnity of 200 million taels, and also to open to commerce four inland ports and the Yangtze for navigation. The 2nd clause Japan was obliged to renounce owing to the pressure brought to bear upon her by Russia, Germany and France in the interest of the "peace of the Far East," and had to console herself with the 30 million taels paid extra by China. When Japan had conclusively shown that the once dreaded "sleeping lion" of China was really sickly, if not moribund, the Powers lost no time in offering their services to the humiliated China as honest brokers. True to their secret purpose, on one pretext after another, Germany established herself at Kiaochau, Russia in Manchuria, France got some lease and railway concession in the south, and even Britain, to preserve the balance of power, felt obliged to demand the lease of Weihaiwei, while Japan obtained from China the pledge of non-alienation of the province of Fukien that lies opposite Formosa to any other Power.

The Boxer Trouble.—All these successive intrusions made by the Powers on her rights and domain roused in 1899 the bitter anti-foreign agitations in China known as the Boxer trouble. Japan in a hurry despatched the 5th Division, which formed the bulk of the Allied army organized for rescuing the diplomatic and foreign communities besieged in Peking by the insurgents who killed our counsellor and the German minister. The trouble cost China 450 million taels in indemnity payable in instalment.

Russo-Japanese War.—Meanwhile Russia had been steadily gaining influence in Korea, for her subservient court, now that China had lost prestige, began to lean upon the Northern Power, leaving the special relation of Japan to the Peninsula utterly disregarded. With her basis of operation firmly established in Manchuria, Russia thought that she could treat Japan's protest with impunity, and when Japan made a conciliatory offer, Russia replied with a high-handed counter offer, so that in spite of all the conventions and memoranda exchanged for defining the relative positions of the two in Korea, the relations between them became more and more strained, especially after Russia's occupation of Manchuria subsequent to the Boxer trouble. And so in 1904, just ten years after the Sino-Japanese war Japan was forced to draw her sword once more to defend her very existence and preserve the peace of the Far East.

The whole nation, except perhaps a handful of pacifists, went into this war as one man, with the grim resolution to conquer or to die, for all believed implicitly that on the issue of the war depended the very existence of the nation. On the other hand, to the muzhiks the war had no meaning; they could not understand why they should have to give their lives in fighting Japan. General Kuropatkin, the unfortunate Commander-in-Chief in the disastrous battle of Mukden, must have thoroughly measured the fighting strength of the Japanese army when he visited our country a few years before the outbreak of the war, but evidently he did not take into full account this vital factor in the psychology of the two warring nations. Better equipped than their foe, strongly entrenched, the Russian army was dislodged from one position after another, lost Port Arthur, though after a heroic defence lasting for about six months, was routed in the great battle of Mukden, and when the Baltic fleet, after having effected

with credit the weary voyage, was literally wiped off the face of the Japan Sea by Admiral Togo in May 1905, Russia decided to give up the hopeless war. The result was the Portsmouth Treaty signed by the representatives of two hostile countries on 5th Sept. 1905 through the mediation of President Roosevelt. Russia refused to pay any indemnity, but agreed to recognize Japan's supremacy in Korea, to hand over to Japan the lease of the Liaotung peninsula and the South Manchuria Railway with the mining and other rights pertaining to it and to cede to her the southern half of Saghalien.

Anglo-Japanese Alliance.—It was in 1902, or a little before the Russo-Japanese war, when the attention of the European Powers was directed to the Far East, that Japan and Great Britain entered into an Agreement for Alliance, the two parties mutually recognizing as well as safeguarding their own interests in China, and Britain admitting Japan's special position in Korea. In 1905 the Agreement was enlarged in scope and was replaced by a new stipulation designed to cover the maintenance of general peace in Eastern Asia and India; was further modified in 1911 and made effective till July 1921. The dual compact on the whole worked with marked success, and while it greatly strengthened the position of Japan in the Far East, it enabled Britain to concentrate her fleet at home.

Korean Annexation.—By virtue of the Portsmouth Treaty Japan proceeded to place Korea under her protection and this was followed in 1910 by the Treaty of Annexation, the year after the assassination of Prince Ito, the first Viceroy of Korea, at Harbin by a Korean fanatic.

Japan in International Politics

The two wars internationally raised the status of Japan: she was no longer obliged to appeal to the magnanimity of the Powers in guarding her interests and rights. The Powers were now willing to make advances and to seek her hand. They even began to watch her movements with jealous and suspicious eyes; and for this altered attitude of the Powers toward Japan the responsibility was laid chiefly on the so-called militarists, who, flushed with the success of Japan's arms in foreign warfare, grew arrogant and too often insisted upon their own way in shaping domestic policy and determining foreign relations. Be that as it may, Japan's position was now sufficiently established to warrant the Powers with special interests in the Far East in entering into agreement with her for guaranteeing the general peace in this region, for maintaining the respective situations and territorial rights of the contracting parties, safeguarding the integrity of China and upholding the principle of equal opportunity and the open door in that country. It is true such a covenant with Britain was concluded first in 1902, to be afterward expanded into an offensive and defensive alliance with certain restrictions, but those with France, Russia and America were arranged after the Russo-Japanese war. At the same time America and the British dominions of Canada and Australia began to place obstacles in the way of free immigration of Japanese laborers and to try to subject those already residing there to unfair treatment. This has given rise to a grave problem of racial discrimination, a question that has begun to arrest the

serious attention of thinkers the world over in the interest of the general peace of the whole human race and of humanity!

Death of Emperor Meiji.—On July 31, 1912, Meiji Tenno died before attaining his 60th anniversary, but it may be said that his memorable reign was brought to a fitting close. His memory will forever be held in profound veneration by the people as one of the most illustrious sovereigns that have ever ruled over the country. With the immediate accession of his son, Prince Yoshihito (Emperor Taisho) to the Throne began the new era of Taisho.

The European War and Japan

When the Great War broke out in 1914, it was a foregone conclusion that Japan should cast in her lot with the Allies, and so in August 1914 she declared war on Germany, and a few days later treaty relations with Austria-Hungary also ceased. In November the fort of Tsingtau was captured in co-operation with the British contingent. This was followed by occupation of the German possessions in the South Seas, the effective expulsion of German commerce-raiding cruisers and the despatch of our fleet to the Mediterranean to assist the Allies in their naval activities.

When the hostilities came to an end in November, 1918, with the conclusion of the Armistice, the Peace Conference was held from January to June 1919, at which Japan was represented by five delegates including Marquis Saionji, Baron Makino and Viscount Chinda. By the terms of the Peace Treaty concluded on June 28th Japan acquired rights and privileges concerning Shantung, which she pledged herself to restore to China with all its rights, only keeping to herself the economic privileges that had once been granted to Germany. By virtue of the Peace Treaty and the League of Nations Covenant Japan was given a mandate over the German South Sea territories north of the equator, including the Marshall and Caroline Islands and the Island of Yap. Later, a controversy regarding Yap arose between Japan and U.S.A. due to the latter's protest against the decisions in December 1919 of the Supreme Council with regard to the assignment of mandatory territories, but the question was at length settled in September 1921 before the opening of the Washington Conference, Japan recognizing the right of U.S.A. and other countries to land the submarine cables on the Island. Another question that commanded keen interest at the Peace Conference was that of the abolition of racial discrimination as submitted by the Japanese delegates before the League of Nations Committee, though Japan had to withdraw and reserve it for future discussion.

Siberian Expedition.—The military expedition of Japan to Siberia was originally undertaken in common accord and in co-operation with the United States in August, 1918. It was primarily intended to render assistance to the Czecho-Slovak troops who, in their homeward journey across Siberia from European Russia, found themselves in grave and pressing danger at the hands of hostile forces under German command. Great Britain, France, Italy and China also joined the expedition and sent their troops to Vladivostok. The allied forces fought their way from Vladivostok far into the region of the Amur and the Trans-Baikal Provinces to protect the railway lines which

afforded the sole means of transportation of the Czecho-Slovak troops from the interior of Siberia to the port of Vladivostok.

With the termination of the Great War, England and France began to withdraw their troops from Siberia, and the withdrawal of Italian and Chinese troops was also completed in 1920. In January, 1920, the United States decided to end its military undertaking in Siberia, and ordered the withdrawal of its forces. For some time thereafter, Japanese troops continued alone to carry out the duty of guarding the Trans-Siberian Railways in fulfilment of Inter-Allied arrangements and of affording facilities to the returning Czecho-Slovaks. After the departure of the latter in September 1920, Japan completed the evacuation of the Trans-Baikal and the Amur Provinces, but the protection of resident Japanese subjects in Eastern Siberia and the menace threatening the Korean frontier made it necessary for the Japanese troops to remain in North Manchuria and the southern portion of the Maritime Province up to October 25, 1922, when the last column of Japanese troops left Vladivostok and the evacuation was completed.

The affair has proved a costly one to Japan. Since Aug. 18, 1918, when her troops first landed at Vladivostok, Japan dispatched in turn 11 divisions; the number of these troops amounted in November, 1918, to some 70,000 (including non-combatants) but this was soon reduced to 26,000 by the end of that year, to be further withdrawn thereafter. The total casualties numbered about 1,475 officers and men killed and over 10,000 wounded, besides 610 who fell victims to illness. The expenditure of the military operations that spread over five years drained the national coffers of about ¥700 millions.

Occupation of Saghalien.—The occupation of the Russian Province of Saghalien by Japanese army was in reprisal for the incident of 1920 at Nikolaievsk, where more than 700 Japanese were cruelly tortured and massacred, and was, therefore, wholly different, both in nature and in origin, from the stationing of troops in the Maritime Province. The occupation was effected early in July, 1920, and lasted for nearly five years.

On the establishment of the Soviet Government of Russia, conferences were held between the representatives of the two Governments with a view to finding basic principles for solving the pending problems between Japan and Russia and restoring the former diplomatic relations, first conference at Dairen in 1921, next at Changchun in 1922, and a third in Tokyo in the summer of 1923. But each time the negotiations proved futile owing to the difficulty of reaching a satisfactory settlement of the Saghalien question. The fourth and final conference between the Japanese Minister in Peking (Yoshizawa) and the Ambassador (Karakhan) of the Soviet Government of Russia in Peking, that was opened in the summer of 1924 was satisfactorily concluded on January 20, 1925, and the treaty signed by the two plenipotentiaries received sanction by the Prince Regent on February 25. By the exchange of formal ratification of the treaty between the two plenipotentiaries in Peking the next day the restoration of diplomatic relations between the two countries was at last accomplished. The Japanese Army was promptly withdrawn from the occupied territory and the protracted trouble disturbing peace in this quarter of the globe was definitely settled.

Washington Conference

Japan's interest in this International Conference was far more vital than in the Peace Conference at Versailles, as it was held for the express purpose of limiting naval armament and discussing the Pacific problems with special reference to China. Japan was represented by Admiral Baron Kato, then Minister of the Navy in the Hara Cabinet, Prince Tokugawa, President of the House of Peers, Baron Shidehara, Japanese Ambassador at Washington, and Mr. Hanihara, Vice-Minister of Foreign Affairs.

The Conference clarified the relations between Japan and other countries represented at the Conference table and, in particular, went far to remove the suspicions and misunderstandings entertained abroad regarding Japan's attitude toward China. (For further details vide the Chapters dealing with the Navy and Diplomacy).

Crown Prince's Journey Abroad

The journey which the Crown Prince undertook to Europe in March-September 1921 to make observations and exchange courtesies with sovereigns of European countries was an event unprecedented in the history of Japan, and was moreover an unqualified success in every respect.

Then in November of the same year the Crown Prince was appointed Regent to undertake the conduct of State affairs in place of his Imperial father who was suffering from chronic illness and was incapacitated from attending to public duties. In the spring of 1924 the Crown Prince married Princess Naga-ko, first daughter of Prince Kuni. The Crown Prince's foreign tour was followed by that of his younger brother Prince Chichibu, 2nd Imperial son, who proceeded to England for study leaving Japan in May, 1925. He entered Oxford in October, 1926, which he had to leave on learning that his father was critically ill and return home.

The Demise of Emperor Taisho

His Majesty Yoshihito, the 123rd Emperor, passed away on December 25th, 1926, at the Imperial Villa at Hayama, and on the same day Prince Regent Hirohito ascended the Throne as the 124th sovereign of the Empire. According to the traditional custom of the Imperial House the late Majesty was given the posthumous title of Taisho Tenno, while the new era named Showa was adopted for the present reign.

It was probably in conformity with the trend of the times that the two events of such supreme national importance (departure of an Emperor and accession of his successor) were officially proclaimed according to actual fact; the time-honoured custom could never have allowed their occurrence outside the Imperial Palace.

CHAPTER III

EARTHQUAKES, VOLCANOES AND MINERAL SPRINGS

A. EARTHQUAKES

Introductory

Japan is a land of volcanoes and earthquakes. It owes its beautiful scenery, in many instances, to volcanic agency, while the graceful outline of the snow-capped Fuji-yama with its logarithmic curves, an emblem of purity and sublimity, is a common art motif. With regard to seismic disturbances, it may be said that in Japan the telluric energy is still in the young and vigorous stage of development, and earthquakes have naturally made a profound impression upon our countrymen from the earliest times, the first record of an earthquake in authentic history dating back to the reign of the Emperor Inkyo, 416 A.D. In former times an earthquake catastrophe was believed to be a divine warning of some great social event, and it is a noteworthy fact that an earthquake often served as a stimulus for raising the courage of our people in time of danger. Thus, on the occasion of the famous shocks of the first year of Ansei (1854), the year in which the treaty with Commodore Perry was concluded, the Daimyo of Tosa issued proclamations enjoining his subjects to take these disasters as writing on the wall and to rouse themselves to guard the realm against all possible emergency of internal troubles and foreign complications. The attempt to obviate serious effect of seismic disturbances is, as may be expected, shown in the style of various ancient Japanese buildings. Thus, a properly built "sammon" (temple gate), "kanetsuki-do" (bell tower), and "gojunoto" (five-storeyed pagoda) can never be overturned by an earthquake, however violent. The last-named structures are in principle exactly conformable with the modern instrument called the duplex pendulum seismograph, since they consist of the outer portion or tower, which may be likened to an inverted pendulum, and of the central suspended column which forms a pendulum whose lower end is not in contact with the ground; these two systems which are respectively in unstable and stable equilibrium, combine into a building capable of lessening the disasters of seismic shocks. On the occasion of the great Ansei earthquake (1855) of Yedo, the "gojunoto" at Asakusa had its "kurin," or large vertical metal rod on the top, considerably bent, but the building itself sustained no damage. Again, the curved form of a large stone "ishigaki," or dry masonry retaining wall, is a feature peculiar to the Japanese castle building not to be found in the architecture of China, Chosen and other countries. Its origin was probably in the idea of making the stone-wall earthquake-proof. The wall curve



forms a parabola, and a noteworthy fact is that a column whose wall is parabolic has the property of being seismically uniform in strength, namely, of possessing a stability against the earthquake shock which remains constant for the different sections. A stone retaining wall with a parabolic form is thus free from the defect of being weakest at the base, thereby lessening the risk of the production of the "marginal vibration," which may result in the formation of cracks along the upper edge and the sliding down of the side surface. As no cementing material was used in the construction of the stone castle walls, the old Japanese civil engineers had evidently to give the "ishigaki" a form calculated to possess in itself a sufficient strength and stability.

Japanese Arc

Where great mountain ranges are arranged on chains of islands in the form of a circular arc, the convex, or outer portion, which corresponds to the tension side, is often shaken by great earthquakes; while the concave, or inner portion, corresponding to the compression side, is disturbed only by occasional local shocks. This is notably the case with the Japanese arc, whose convex side is turned toward the Pacific, parallel with and off whose coast there runs the principal earthquake zone, forming the connecting link between the American and Himalaya-Mediterranean lines of disturbance. Since the great shocks of 1854 the southern and western parts of Japan have not been visited by great seismic disasters and "tsunami" (tidal-waves) that very often follow them, excepting those of 1924 and '25.

Volcanoes whether active, dormant, or extinct are located only on the Japan Sea side, or the compression portion, of the Japanese islands and along the Fuji volcanic chain, which may be regarded as a sort of crack in the arc.

Small Earthquakes

The number of earthquakes happening in different parts of Japan gives the average yearly frequency of some 1500, or of about four shocks per day. In Tokyo a sensible shock occurs on the average once every three days.

The Destructive Earthquakes of Tokyo and Tajima

In point of magnitude of damage inflicted on life and property the great earthquake of Sept. 1, 1923 that overwhelmed the region bordering on the Bay of Sagami is indeed without a rival in the world's history, the disastrous fire that burst out on the wake of the tremendous upheaval reducing to ashes in a couple of days about one half of Tokyo, and practically the whole of Yokohama. Scientifically the September shock belongs to what is called "world shaking earthquakes," and was recorded, for instance, at Granada, Spain, at 12h 12m 33s of September 1st, while at Sydney it began at 12h 0m 8s.

To the lasting regret for accuracy of seismological investigations it should be noted that the instruments at both the Seismological Institute, Imperial University, Tokyo, and the Central Meteorological Observatory broke down just at the critical

moment, so that the only reliable observation carried out at Tokyo indicated that the preliminary tremor lasted about 12.1 s. and that at Tokyo it occurred at 11h 58m 46s of the Central standard time, that is, the time of the 135 meridian; that taking various factors into consideration, the depth of the seismic centre must have been about 45 km. and the position of the epicentre at the bottom of the northern part of Sagami Bay.

The seismographical record taken at the Central Meteorological Observatory consisted of the following elements:

Initial time	11h 58m 46s 6
Duration of preliminary tremor.....	12s 1
Maximum amplitude	89mm
Intensity	disastrous
Epicentre.....	Northern part of Sagami Bay; longitude, 130°2 E—latitude, 35°1 N.

As to the origin of this terrestrial disturbance the hypothesis offered is that, judging from the distribution of geological strata and the nature of topographical features of the affected area, it was most probably due to the powerful strain to which the earth-crust lying between Izu peninsula, the most elevated portion, and the Sea of Sagami, the most subsided portion, in this region, must have been subjected for a considerable period of time. The shock caused severe dislocation of the strata of the disturbed area, the shores of the Bay of Sagami and the west coast of Boso peninsula marking sudden upheaval, as much as 55 metres at some places, while on the other hand the bottom of Sagami Bay fell by 20 to 400 metres. Among other noteworthy phenomena was the visit of seismic sea-waves or "tsunami" which attained the height of 8 metres at some parts on the eastern shores of Izu peninsula, though on the coast of Tokyo Bay the height was generally below one metre. Landslides occurred here and there, notably along the eastern shores of Izu peninsula, one at Nebukawa, about midway between Atami and Odawara, being most disastrous, while the hilly district of Hakone was also severely damaged from this particular dislocation of earth-crust.

As is usual with most strong earthquakes the September convulsion was followed by long trains of after-shocks, and it is believed by experts that some three years must elapse before the dislocated strata could settle to normal condition. Here is the record of after-shocks observed at the Central Meteorological Observatory.

Number of after-shocks (Sept. 1st, 1923—Sept. 1st, 1925)	
Felt	about 1,600
Not felt	about 6,100

The seat of after-shocks is naturally shifting. So far two very strong passing vibrations of this description have occurred, one on Sept. 2, 1923, off Katsu-ura on the southern coast of Boso peninsula and the other on January 15, 1924, in Sagami Bay. Its intensity is indicated by the following data:

Initial time	5h 50m 25s
Duration of preliminary tremor.....	7s 6
Maximum amplitude	22mm 5
Whole duration	12m
Intensity	Strong
Epicentre....	Sagami Bay, L. 139°2 E.—L. 35°2 N.

Now when it is remembered that a destructive shock means removal of an abnormal underground stress accumulation, it may naturally be concluded that its repetition from one and same area is a contingency of remote possibility.

The earthquakes felt in Tokyo in recent years originated chiefly in the following six zones: (I) Boso peninsula and the bottom of its outside sea, (II) the vicinity of Mt. Tsukuba and Kasumiga-ura lagoon; (III) the Hakone district and vicinity; (IV) a zone off the eastern coast of the Main Island; (V) Sagami Bay and neighborhood; (VI) the low Musashi plain, in which Tokyo is situated, and especially the valley of the River Kinu.

Earthquakes in Tajima and Tango

The occurrence of destructive earthquakes in Tajima on May 23, 1925, and next in Tango on March 7, 1927, affords an interesting subject for seismic study, as these two contiguous provinces on the Japan Sea coast had been immune for centuries from destructive shocks. The epicentre of the latter lay about 18 km. to the east of the former. The record for the two shocks is as follows:

	Tajima	Tango
Initial time	11h 10m	18h 28m 42s2
Duration prel. tremor....	13s3	53s7
Max. amplitude	2mm	about 35mm
Whole duration	18m 25	about 1h.
Intensity	moderate	slight
Epicentre.....	{ L. 134°50'.5 E. L. 35°38'.7 N.	L. 35°39' N.
		L. 135°1' E.
Casualties	2,900	2,908

The two earthquakes furnish new examples of the eastward or northeastward translocation of activity which had been prevailing in the seismic zone on the Japan Sea coast.

The principal towns destroyed in the Tajima earthquake are Toyokoka and Kinosaki, the latter being a popular spa. In the Tango earthquake, two towns of Mineyama and Amino suffered the worst, the latter being one of the most important silk crepe centres in Japan.

Seismic Record in Japan

The most disastrous calamities recorded in the pre-Toku-gawa period were:—

- 684 A.D. An area of about 3 sq. miles in Tosa subsided and was covered by sea-water.
- 869 „ Earthquakes with tidal waves visited Mutsu and thousands of people were killed.
- 1361 „ Earthquakes in districts round about Kyoto.
- 1498 „ Tokaido was visited by a severe earthquake, causing death of over 20,000 persons. Hamana lagoon (Maizaka station, Tokaido Railway, formerly inland lake) was formed.
- 1596 „ Bungo, Kyushu, was visited by a severe earthquake and 700 persons killed.
- „ „ Districts round about Kyoto shaken and 2,000 persons killed.

The principal calamities that have occurred since are:—

Date	Place	Houses partly or wholly des- troyed	No. of deaths	
1605, Jan. 31	Pacific coast	—	5,000	
1611, Sept. 27	Aizu	—	3,700	
1611, Dec. 2	Pacific coast, O-u (with tidal waves)	—	1,700	
1662, Jun. 16	Places about Kyoto.....	5,500	500	
1666, Feb. 2	Takata, in Echigo.....	—	1,500	
1694, Jun. 19	Noshiro, in Ugo.....	2,760	390	
1703, Dec. 30	Places about Tokyo (with tidal waves)	20,162	5,233	
1707, Oct. 28	Pacific coast of Kyushu and Shikoku (with tidal waves)....	29,000	4,900	
1751, May 20	Takata, Echigo	9,100	1,700	
1766, Mar. 8	Hirosaki (with tidal waves).....	7,500	1,335	
1792, Feb. 10	Hiizen, Higo and vicinity (with tidal waves)	12,000	15,000	
1828, Dec. 18	Nagaoka, in Echigo.....	11,750	1,443	
1844, May 8	Shinano	34,000	12,000	
1854, July 9	Yamato, Iga, and Ise.....	5,000	2,400	
1854, Dec. 23	Tokaido and Shikoku.....	60,000	3,000	
1855, Nov. 11	Tokyo	50,000	6,700	
		Houses destroyed	No. of deaths	No. of injured
1891, Oct. 28	Mino-Owari	222,501	7,273	17,175
1894, Oct. 22	Shonal	8,403	726	977
1896, Jun. 15	Sanriku dist. (tidal waves)	13,073	27,122	9,247
1896, Aug. 31	O-u	8,996	209	779
1906, Feb. 17	Formosa	8,941	1,228	2,329
1909, Aug. 14	Mino-Omi	9,544	37	441
1914, Mar. 15	Akita	770	93	210
1923, Sept. 1	Sagami Bay	558,049	91,344	—
1925, May 23	Northern part of Tajima.	3,668	381	410
1927, Mar. 7	Tango	7,367	2,900	—

Seismological Investigation in Japan

Japan has done more than any other country in the world as regards seismic investigations.

The foundation of the system of seismic study and research in Japan was laid by the combined efforts of Profs. Milne and Ewing, formerly of the Tokyo Imperial University, and their colleagues, including the late Dr. Kiyokage Sekiya, who was the first occupant of the chair of seismology in the University, the late Dr. Fusakichi Omori who died shortly after the seismic disaster of September 1923, and other scientists. The system and organs for seismic investigation and researches have since made a marked progress and show a perfection almost unrivalled in other countries, and Japan can boast of a closely set and wide-spread earthquake observation net, consisting of the Central Meteorological Observatory in Tokyo, and a number of local stations established in various parts of the country. The results of the observations made by these local stations are reported to the Central Meteorological Observatory and are made public. Besides the meteorological observatories, there are also the

Earthquake Investigation Institute attached to the Education Department, the Central Seismological Institute attached to the Tokyo Imperial University and the Seismic Disaster Prevention Committee under the control of the Education Minister, which are also engaged in the investigation of and research into various seismic phenomena. The reports and bulletins published by those observatories and institutes, which contain the results of the investigations and researches made by them, are widely distributed among all seismological observatories and meteorological observatories in foreign countries.

With a view to bringing under complete control organs for the investigations and researches of seismic phenomena the Education Department decided to establish a central organ named the Earthquake Research Institute as a central organ of seismic phenomena investigations, for which appropriations of ¥600,000 was placed on the budget for 1925. The establishment is attached to the Tokyo Imperial University and Dr. K. Suyehiro was appointed its president.

Relation between Volcanoes and Earthquakes

Active volcanoes being a safety valve for disquieting factors working within the earth crust, places situated near them have only rarely been visited by destructive seismic disturbances of any magnitude. For instance the districts round Asama, Kirishima, etc., in Japan and Naples at the foot of Vesuvius have not experienced seismic disasters from ancient time.

Concluding Remarks

Although the problem of the prediction of destructive earthquakes is still very far from its solution, considerable light has been thrown on the causes, the geographical relations, and the time distributions of earthquakes, so that we can determine in many cases the probable intensity and the direction of motion in a future shock at a given place, or the next locality in a given earthquake zone likely to be visited by a destructive earthquake. As far as wooden structures are concerned, the question of the earthquake-proof building has to a large extent been solved, as it is not difficult to construct timber houses which can resist any shock whatever. Steel-brick and reinforced concrete also furnish good systems of constructing earthquake-proof buildings.

The fact that even a very small amount of precaution taken against earthquake is sufficient to save a considerable loss of life and property is well illustrated by comparing seismic damage in Italian and Japanese cities. Thus, in the Messina earthquake of Dec. 28, 1908, the total number of victims was about 120,000 of whom about 75,000 died in Messina and suburbs. The intensity of earthquake motion in the last named city was a little lower than that in the city of Nagoya on the occasion of the Mino-Owari earthquake of 1891. The population of Nagoya in 1891 was 165,339, which was nearly equal to that of Messina and the vicinity, and of these only 190 were killed in the catastrophe. Even supposing the intensity of seismic motion in Messina to have been equal to that in Nagoya, the number of persons killed in the former city was about 430 times greater than that in the

latter. That is to say, when comparison is made with the Japanese city, about 998 per 1,000 of the number of those killed in Messina must be regarded as having fallen victims to seismologically bad construction of the houses.

The risk rate of wooden buildings in earthquake is comparatively limited as stated, but the disasters caused by the resultant fire are extensive and incalculable, as in the case of the recent terrible earthquake-fire still very fresh in our memory, in which by far the greater portion of the killed were burned to death. In the great earthquake of San Francisco in 1906, too, the greater portion of the damage and casualties was due to the fire occasioned by the earthquake. In view of these facts it cannot be said that wooden buildings are absolutely safe from the earthquake shocks. (Vide Chap. on Earthquake-Proof Construction by Prof. Naito.—Ed. J. Y. B.)

B. VOLCANOES

Three volcanic ranges exist in Japan, viz., Kurile range, Fuji range and Kirishima range. They contain about 200 volcanoes of which some 50 are more or less active.

The term "active" or "extinct" is, however, relative, for volcanoes believed to be extinct have not infrequently given a terrible demonstration of their dormant activity. Among those that are semi-active the first to be mentioned is Mount Fuji, dear to the hearts of all true Japanese. Since it exploded with destructive violence in 1707 it has remained resting, but the presence of a deep red-hot crater at the summit affords an ominous sign that it may be aroused to fury any time. Of the notable cases of explosions after a long spell of dormancy in recent times may be mentioned Torijima (1902, killing 125 islanders), Agatsuma (1,949 metres, in 1903 when two geologists were killed), Bandaisan (1,819 m. in 1888) and Sakurajima (1,060 m. in 1914, last in 1779). Volcano cones that are still active are, to mention only those that are noteworthy, Tarumai (1,023), Noboribetsu (1,023), Komagatake (1,140), Adataro (1,710), Nasu (1,917), Shirane of Nikko range (2,578), Unzen in Hizen (1,360), Kaimon (924), Kirishima (1,700), Mihara (755) on Oshima Is. at the mouth of Tokyo Bay, Asama (2,542), Usu (725) in Hokkaido. Aso, a complex volcano with its highest cone towering 1,592 m., is perhaps the largest volcano in the world, its crater extending about 15 miles north and south and 10 miles the other way. Nasu, Kirishima, Oshima and Asama are almost perpetually smoking.

The distribution of famous volcanoes and the positions of the foci of destructive earthquakes which have occurred are shown in the accompanying chart.

Tokachidake, a triple volcano (1,812 metres) situated in the centre of Hokkaido, exploded in the afternoon of May 23, 1926, and devastated the plantations at Kamifurano, a village at the foot of the volcano, the whole district having been flooded with the muddy torrents produced by the action of lava on the snow-covered slopes and the loosened surface soil. Over 4,125 acres were ravaged and 171 persons were killed and 200 severely injured. The total damage was about 6 million yen.

C. MINERAL SPRINGS

As a redeeming feature to compensate for the presence of disquieting volcanoes, a large number of mineral springs, hot or cold, are found throughout the country. Japan, in fact, occupies a very high place in the world as to number of mineral springs and especially of those that possess high medical value. There are at least one hundred mineral springs, mostly hot, which from easy accessibility or high efficacy, are popular. The following is based on the investigations carried out by the Home Office.

Hot Springs

	Honshu	Hokkaido	Kyushu	Chosen	Taiwan	S. Man- churia	Total
Simple cold	134	1	20	6	0	—	161
Simple hot	152	3	70	10	2	4	241
Simple acid	17	1	3	0	2	0	23
"Earthy" acid	12	1	3	0	2	0	18
Alkaline acid	94	20	35	0	4	0	153
Salt	155	5	19	5	3	1	188
Bitter	58	4	16	0	1	0	79
Iron	29	1	2	3	1	0	36
Sulphur	95	14	18	9	6	0	142
Sulphuric acid	10	0	1	0	0	0	11
Acid vitriol	5	1	0	0	1	0	7
Alum vitriol	7	0	1	0	3	0	11
Not yet ascertained....	82	0	17	35	2	—	136
Total	850	51	205	68	27	5	1,206

For further details the reader is referred to *The Mineral Springs of Japan*, by Dr. R. Ishizu, Tokyo Imp. Hygienic Laboratory; and *the Hot Springs in Japan*, by Government Railways, 1922.

List of Popular Hot Springs Resorts

Name	Nearest Rly station	Character	Above sea level. ft.	Ave. Temperature	
				C.	F.
Arima	Arima	{ Simple carbon- dioxated	1,287	57.8°	136.0°
Asamushi	Asamushi	{ Concentrated common salt (Seaside)			113.9°
Atami	Atami	Sulphated bitter	74	79.0°	174.2°
Beppu	Beppu	Simple thermals	50	53.0°	127.4°
Dogo	Dogo	" "	35	44.5°	112.1°
Hakono	Odawara	{ Alkaline			
Miyanoshita		{ common salt..	1,377	—	137.3°
Ashino-yu		Sulphur	2,760	—	137.0°
Higashiyama	{ Aizu Wakamatsu	Saline bitter	850 (about)	47.5°	117.5°
Ikao	Maebashi	Sulphated bitter	2,800	46.0°	114.8°
Ito	Ohito	{ Simple thermals (Seaside)		46.9°	116.4°
Kinosaki	Kinosaki	{ Earth-muriated common salt..	—	—	126.1°
Kusatsu	Kusatsu	Acid vitriol	4,500	62.0°	143.6°

Name	Nearest Rly station	Character	Above sea level, ft.	Ave. Temperature	
				C.	F.
Misasa	Kurayoshi	Simple thermals	50	71.0°	159.8°
Nagaoka	Nagaoka	" "	100(about)	48.5°	119.3°
Nasu	Kuroiso	{ Hydrogen sulphide	.....4,500	—	82.4°
Nikko Yumoto	Nikko	{ "	4,590(about)	—	113.9°
Noboribetsu	Noboribetsu	Vitriol	..... 660	97.0°	206.6°
Shibu	Toyono	{ Sulphated common salt	..6,950	76.0°	168.8°
Shima	Maebashi	{ Earth-muriated common salt	..2,500	93.0°	199.4°
Shiobara	Nishinasuno	Alkaline	.....1,150	—	132.4°
Shuzenji	Ohito	{ Saline common salt	..... 330	77.0°	170.6°
Unzen	Isahaya	{ Acid hydrogen sulphate	.....2,400	51.5°	124.7°
Shiobara	Nishi-nasuno	{ Earth-muriated common salt (Seaside)	—	—	179.2°
Yamanaka	Dai-shoji	Sulphated sulphur	—	—	120.2°
Yamashiro	"	Saline sulphur	.. —	—	149.5°
Yugawara	Yugawara	Common salt	... 351	88.5°	191.3°

Japanese hot springs are of such diversity as to composition that visitors are afforded an unusual freedom in their choice. On the whole simple and salt springs predominate, the rest being generally sulphur and alkaline carbon-dioxated springs. The distinctive feature of Kusatsu, Nasu, Noboribetsu, Kirishima and others is that they carry free mineral acids in their alumina and iron contents, and this peculiarity is especially marked in Kusatsu and Nasu. Many springs contain small proportions of boric acid and iodine, bromine, lithium, manganese and other compounds.

Of course, springs found in the same locality and even in close proximity are far from being uniform in their chemical composition, temperature, etc., as is exemplified in the case of the hot-spring region of Hakone which is most easily accessible to Tokyo citizens. The twelve spas of Hakone which exist at altitudes more or less different vary in temperature, tonic properties, etc. Miyanoshita, the foremost of the twelve, is an alkaline common salt spring; Ashinoyu, sulphur; Kowakidani, acid vitriol; Owakidani, saline sulphur; Yumoto, Tonosawa and Ubago, simple thermals; Yunohanazawa, acid hydrogen sulphide; Gora, acid and sulphur; Sokokura, common salt.

The Izu Peninsula which is situated due south of the Hakone region and connected by a common mountain ridge, is honey-combed with hot springs. These are Atami, Ito, Shuzenji, Nagaoka, Yugawara, detailed in the table, and then Izusan, Kona, Hatake and other smaller spas. Beppu (Kyushu) also possesses diverse hot-springs, as simple carbon, alkaline, iron-carbonate, acid alum vitriol, etc.; Arima (Hyogo-ken) has some common salt springs containing bromine or iodine, iron carbonate, common salt, etc.; Shiobara (Tochigi-ken), those of alkaline common salt; Shima (Gumma-ken), sulphated common salt; Noboribetsu (Hokkaido), acid vitriol; Kusatsu, acid alum vitriol, acid hydrogen

sulphide; Misasa (Tottori-ken), muriated sulphur; both Nasu-Yumoto (Tochigi-ken) and Shibu (Nagano-ken), acid hydrogen.

Looking over the map of Japan dotted with hot-springs we notice three important clusters, viz., Hakone-Izu, Kusatsu, and Beppu. Classified as to altitude Kusatsu and its subsidiaries Shibu, Shima, etc., to speak only of popular springs, stand highest, while Atami, Asamushi, Wagura, etc. are found near the seashore.

Radio-activity of Japanese Mineral Springs

In 1914, at the instance of the Home Office Dr. Ishizu, of the Tokyo Hygienic Laboratory, carried out examination of about 150 mineral springs with the special object of ascertaining their radio-activity. Of these five have been found conspicuous in radium emanation, viz: Masutomi in Kai Province (with 235.63 to 823.34 Mache's units per litre of water), Takayama in Mino Province (281.09), Misasa in Hoki (10.23-142.14), Murasugi (49.61) and Tochiomata (25.86) in Echigo, the first two being cold springs. Masutomi is at the foot of Mt. Kimbu and the strata in the neighborhood, contain scheelite, apatite, tourmaline, sulphide ores, etc. Takayama is on the River Kiso and in the neighborhood are found tin sand, wolframite, fergusonite, monazite, and naegite. Thorium is contained in the last two. Compared with the famous mineral springs with strong radio-activity in Europe, Masutomi, according to Dr. Ishizu, is second only to Joachimsthal and Brambach, but surpasses Gastein, Landeck, Baden-Baden, etc. Masutomi is therefore the third spring with the greatest radio-activity in the world. Misasa is only next to Ischia in Italy and almost rivals Gastein as a radio-activity hot spring. All these Japanese mineral springs are found in granite regions.

A List of the Radio-Active Springs

(Emanation per liter of water in Mache's unit.)

Name	Prefecture	Mache's units	Character	Temperature	
				C.	F.
Misasa	Tottori	142.14	Simple	71.0°	159.0°
Sekigane	"	33.47	Sulphur	42.0°	107.6°
Tochiomata	Niigata	25.86	Simple	39.0°	102.2°
Tokatta	Miyagi	14.58	Carbonated	56.0°	132.8°
Yunokawa	Hokkaido	13.20	—	48.0°	118.4°
Kawatana	Yamaguchi	11.88	Salt	40.0°	104.0°
Owani	Aomori	10.30	Common salt ...	62.0°	143.6°
Kachiml	Tottori	8.58	{ Muriated saline bitter	56.0°	132.8°
Kinosaki	Hyogo	8.41	{ Earth-muriated common salt..	60.3°	140.6°
Onogawa	Yamagata	5.80	" ..	70.0°	158.0°

Cold Springs

Name	Prefecture	Mache's units	Character	Temperature	
				C.	F.
Masutomi	Yamanashi	1,425	{ Earthy common salt	23.0°	73.4°
Takayama	Gifu	281	Simple	10.0°	50.0°
Ikeda	Shimane	187	Carbonated(?) .	17.0°	62.6°
Arima	Hyogo	87	—	24.0°	75.2°
Hirukawa	Gifu	60	Simple	12.0°	53.6°
Murasugi	Niigata	49	Simple	25.6°	78.0°
Tochiomata	"	44.48	Simple	36.0°	96.8°
Takarazuka	Hyogo	31	{ Simple carbon- dioxated	18.5°	65.3°
Kaidani	Okayama	13.38	Simple	14.5°	58.1°
Bohata	Fukushima	11.96	Sulphur	14.0°	57.2°

CHAPTER IV

POPULATION

INTRODUCTORY REMARKS

The total population enumerated in Japan proper on the 1st of October, 1925, numbered 59,736,822 persons, as against 55,963,053 returned in the 1920 Census, an increase of 3,773,769. The rate of increase in the quinquennium was 6.7 per cent., corresponding to the average annual increase of something more than 750,000.

Density.—According to the last Census, the density of population in Japan proper was 157 persons for every square kilometre while in the 1920 Census it was 147 persons for every square kilometre, an increase of 10 persons per square kilometre. Based on the cultivated area instead of the gross area the density in Japan, according to Prof. Shimizu, of Kelo University, stands far ahead of European countries, as follows:—

Density per square kilometre of Cultivated Area.

England	226	Holland	273
Germany	185	Italy	305
Switzerland	168	Belgium	394
France	108	Japan	969
Spain	90		

Sex Ratio.—The male persons enumerated were 30,012,820 and the female 29,723,884, the male outnumbering the female by 288,936, and this corresponds to a ratio of 101 males to every 100 females as against 100.4 to 100 in 1920.

Urban Population.—Of the 101 cities in Japan proper, 22 returned a population greater than 100,000, Osaka taking the lead with 2,114,804, followed by Tokyo with 1,995,567, Nagoya with 768,558, Kyoto with 679,963, Kobe with 644,212, and Yokohama with 442,938. These are the six premier cities, and then comes Hiroshima with 195,731 population, followed, in the numerical order of population, by Nagasaki, Hakodate, Kanazawa, Kumamoto, Fukuoka, Sapporo, Sendai, Kure, Otaru, Kagoshima, Okayama, Yawata, Niigata, Sakai, and Yokosuka.

Of the above named, the six cities, Kumamoto, Fukuoka, Okayama, Niigata, Sakai, and Yokosuka had attained for the first time the level of 100,000 at the last Census.

While in the 1920 Census, the relative numerical strength of the six largest cities in the country stood in the order of Tokyo, Osaka, Kobe, Kyoto, Nagoya and Yokohama, in the last returns Tokyo changed place with Osaka, and Kobe with Nagoya, Kyoto and Yokohama retaining their old position. The decline of Tokyo and Yokohama in population was due to the earthquake catastrophe of 1923, while the marked gain for Osaka, to 2,144,804 from 1,768,560, and Nagoya to 1,252,983 from 429,997, was due to the incorporation of their suburban districts.

The above 22 cities each having more than 100,000 souls contained 8,843,298, forming 14.8 per cent. of the whole population of the country. This number was composed by 4,669,535 males and 4,173,763 females, at the ratio of 112 males to every 100 females, while the general ratio is 101 to 100, as mentioned before.

POPULATION IN JAPAN PROPER

Returns of "Legal" Population

Year	Males	Females	Total	Annual inc. per 1,000 pop.	Males per 100 females
1915 (Dec. 31)	27,764,085	27,171,679	54,935,755	14.65	102.18
1916 (")	28,118,981	27,518,462	55,637,431	12.77	102.18
1917 (")	28,472,320	27,863,663	56,335,971	12.55	102.18
1918 (")	28,625,617	28,042,094	56,667,711	5.89	102.08
1919 (")	28,914,526	28,319,380	57,233,906	9.99	102.10
1920 (")	29,263,596	28,655,075	57,918,671	11.96	102.12
1921 (")	29,656,261	29,040,875	58,697,136	13.44	102.12
1922 (")	30,040,963	29,419,289	59,460,252	13.00	102.11
1923 (")	30,445,661	29,812,281	60,257,931	13.42	102.12
1924 (")	30,860,032	30,221,948	61,081,954	13.67	102.11
1925 (")	31,340,278	30,704,411	62,044,649	15.76	102.08
1926 (")	31,820,065	31,186,535	63,006,595	15.50	102.03

Note:—Where total disagrees with its components it is due to people of unknown sexes being included in it.

Population by Ages and Sexes* (Oct. 1, 1925)

Age	Real number			Ratio per 1,000 population
	Males	Females	Total	
0-4	4,160,479	4,104,104	8,264,583	138.4
5-9	3,491,171	3,433,261	6,924,432	115.9
10-14	9,410,991	3,324,039	6,735,030	112.8
15-19	2,388,370	2,896,907	5,885,277	98.5
20-24	2,574,799	2,485,728	5,060,527	84.7
25-29	2,256,502	2,136,969	4,393,471	73.6
30-34	1,920,177	1,795,910	3,716,087	62.2
35-39	1,768,538	1,680,839	3,449,377	57.4
40-44	1,624,224	1,597,541	3,221,765	53.9
45-49	1,539,488	1,515,661	3,055,149	51.1
50-54	1,223,831	1,227,072	2,450,903	41.0
55-59	981,235	1,009,582	1,990,817	23.3
60-64	754,000	814,341	1,568,341	36.3
65-69	601,475	692,865	1,294,340	21.6
70-74	401,555	515,625	919,180	15.4
75-79	213,632	309,382	523,014	8.8
80-84	79,096	136,738	215,834	3.6
85-89	17,585	36,653	54,238	0.9
90-94	3,515	9,209	12,724	0.2
95-99	398	1,148	1,546	0.0
Over 100	48	139	187	0.0
Unknown	—	—	—	—
Total	30,013,109	29,723,713	59,736,822	1,000.0

* These statistics are based on the results of the 2nd census taken Oct. 1, 1925.

The married and unmarried population in Japan proper was first compiled in 1886, the quinquennial figures given below:—

Dec. 31	Married			Unmarried		
	Males	Females	Total	Males	Females	Total
1898	7,979,858	7,979,858	15,959,716	14,093,234	13,709,665	27,802,899
1903	8,229,152	8,229,152	16,458,304	15,372,488	14,902,084	30,274,572
1908	8,583,168	8,583,168	17,166,336	16,463,212	15,959,256	32,422,468
1913	9,144,727	9,144,727	18,289,454	17,819,859	17,253,369	35,073,228
1918	9,568,500	9,568,502	19,137,002	19,057,117	18,473,592	37,530,709
1923	11,860,690	11,881,960	23,742,650	16,739,639	14,454,786	31,194,425

* The figures for married males and females in 1918 do not agree because of the registration of bigamy by mistake and also of the denaturalization of a husband.

Ratios of the above figures for married and unmarried per 1,000 population are as follows:—

Dec. 31	Married			Unmarried		
	Males	Females	Total	Males	Females	Total
1898	182.3	182.3	364.6	322.1	313.3	635.4
1903	176.1	176.1	352.2	328.9	318.9	647.8
1908	173.1	173.1	346.2	332.0	321.8	653.8
1913	171.4	171.4	342.8	333.9	323.3	657.2
1918	168.9	168.9	337.8	336.2	326.0	662.2

Births, Deaths, Marriages and Divorces

The returns showing births and deaths were first prepared in 1883, and stillbirths in 1886. The following figures represent the average in each five years:—

Average for	Births	Stillbirths	Deaths	Marriages	Divorces
1904-08	1,512,945	152,074	992,315	399,378	62,131
1909-13	1,729,925	153,920	1,052,735	434,786	59,023
1914-18	1,803,391	141,965	1,215,254	456,074	58,495
1919-23	1,961,547	136,277	1,322,411	514,833	53,998

Ratios of these numbers per 1,000 population are as follows:—

Average for	Births	Stillbirths	Deaths	Marriages	Divorces
1904-08	31.2	3.14	20.5	8.24	1.28
1909-13	33.7	2.99	20.5	8.45	1.15
1914-18	32.6	2.57	22.0	8.07	1.06
1919-23	34.4	2.39	23.2	9.03	0.95

Age of Marriages

Age	1925		1926		Ratio for 1926	
	Males	Females	Males	Females	Males	Females
Under 15	—	—	—	116	—	0.2
15-19	13,818	123,537	13,325	123,677	26.5	246.0
20-24	167,658	254,092	157,404	239,763	313.0	476.8
25-29	192,689	80,108	190,710	77,831	379.2	154.8
30-34	68,850	27,607	67,590	27,712	134.4	55.1

Age	1925		1926		Ratio for 1926	
	Males	Females	Males	Females	Males	Females
35-39	32,290	14,821	30,231	13,980	60.1	27.7
40-49	30,873	15,185	18,790	14,086	57.3	28.0
50-59	11,097	4,905	10,731	4,666	21.4	9.3
Above 60	4,163	1,075	4,066	1,066	8.1	2.1
Total	521,438	521,438	492,847	512,731	1,000.0	1,000.1

Birth-Rates

Year	Males	Females	Total	Males per 100 females	Legitimate	Illegitimate
1922	1,004,022	965,292	1,969,314	104.0	92.0	8.0
1923	1,043,599	999,698	2,043,297	104.4	92.3	7.7
1924	1,019,988	978,532	1,998,520	104.2	92.4	7.6
1925	1,060,827	1,025,264	2,086,091	103.5	92.7	7.8
1926	1,081,793	1,022,611	2,104,405	105.8	—	—
1927	1,048,946	1,011,791	2,060,737	103.7	—	—

Rates of Stillbirths

Year	Males	Females	Unknown	Total	M. per 100 F.	Legitimate	Illegitimate
1922	71,327	60,566	351	132,244	117.8	77.3	22.7
1923	72,126	61,312	425	133,863	117.6	78.1	21.9
1924	67,777	57,707	355	125,839	117.5	78.6	21.3
1925	67,580	56,506	317	124,403	119.6	79.1	20.9
1926	67,562	56,136	340	124,038	120.4	—	—
1927	63,401	53,140	381	116,922	119.3	—	—

The Average Age of Mortality

According to the investigation carried out in 1911 at the request of the Statistics Bureau by Mr. Yano, Actuary and Managing-Director of the First Life Ins. Co., Tokyo, the average age of mortality of Japanese is 43.97 years for men and 44.85 for women. The average age of death for those males who survive five days after birth is 45.27, for those surviving one year 51.11, three years 52.41, six years 51.31 and twenty years 40.35.

POPULATION OF THE PREFECTURES

(Based on the Census taken Oct. 1, 1925)

Prefecture	Area in sq. km.	Pop.	Pop. per sq. km.	Prefecture	Area in sq. km.	Pop.	Pop. per sq. km.
Aichi	5,055	2,319,294	459	Hokkaido..	88,279	2,498,690	28
Akita	11,724	936,410	80	Hyogo	8,427	2,454,679	291
Aomori ...	9,631	812,977	84	Ibaraki ...	6,100	1,409,092	231
Chiba	5,079	1,399,257	276	Ishikawa..	4,198	750,854	279
Ehime ...	5,699	1,096,366	192	Iwate	15,235	900,984	59
Fukui	4,019	597,899	149	Kagawa ..	1,845	700,308	379
Fukuoka...	4,922	2,301,668	468	Kagoshima	9,011	1,472,193	163
Fukushima	13,720	1,437,596	105	Kanagawa.	2,252	1,416,792	604
Gifu	10,462	1,132,557	108	Kochi	7,088	687,478	97
Gumma ..	6,315	1,118,858	177	Kumamoto	7,432	1,296,086	174
Hiroshima	8,448	1,617,680	191	Kyoto	4,559	1,406,382	308

POPULATION

45

Prefecture	Area in sq. km.	Pop.	Pop. per sq. km.	Prefecture	Area in sq. km.	Pop.	Pop. per sq. km.
Miyagi ...	7,287	1,044,036	143	Shiga	4,031	662,412	164
Miyazaki...	7,738	691,094	89	Shimane..	6,618	722,402	109
Miye	5,702	1,107,692	194	Shizuoka..	7,787	1,671,217	215
Nagano ..	13,557	1,629,217	120	Tochigi ...	6,448	1,090,428	169
Nagasaki..	4,116	1,163,945	283	Tokushima	4,135	689,814	167
Nara	3,730	583,828	157	Tokyo	2,142	4,485,144	2,093
Niigata ...	12,594	1,849,807	147	Tottori ...	3,500	472,230	135
Osaka	6,227	915,136	147	Toyama ..	4,257	749,243	176
Okayama..	7,019	1,238,447	176	Wakayama	4,733	787,511	166
Okinawa..	2,151	557,622	259	Yamagata.	9,306	1,027,297	110
Osaka	1,761	3,059,502	1,718	Yamaguchi	6,087	1,094,544	180
Saga	2,444	684,831	280	Yamanashi	4,455	600,675	135
Saitama ..	3,804	1,394,458	367				

POPULATION OF THE CITIES

(Based on the Census taken Oct. 1, 1925)

Cities	Pop.	House- holds	Pop. per H.	Cities	Pop.	House- holds	Pop. per H.
Akashi	37,244	8,566	4.3	Kushiro ...	42,333	8,463	5.0
Akita	43,885	7,994	5.5	Kyoto	679,963	148,672	4.6
Amagasaki..	44,241	9,887	4.5	Marugame..	27,971	6,189	4.5
Aomori	58,794	11,316	5.2	Matsumoto.	63,427	12,973	4.9
Asahigawa.	72,341	13,121	5.5	Matsuyama.	58,292	13,270	4.4
Ashikaga ..	39,401	7,685	5.1	Matsuye ...	41,396	9,206	4.5
Beppu	37,529	8,748	4.3	Mayebashi..	73,688	14,152	5.2
Chiba	41,807	8,788	4.8	Mito	46,527	9,563	4.9
Fukui	59,943	14,229	4.2	Miyakonojo.	30,421	6,293	4.8
Fukuoka ..	146,005	28,029	5.2	Miyazaki ..	42,945	8,780	4.9
Fukushima..	41,379	7,651	5.4	Moji	95,087	21,750	4.4
Fukuyama..	34,048	7,640	4.5	Morioka ...	50,030	9,366	5.3
Gifu	81,902	17,616	4.6	Muroran ..	50,040	10,150	4.9
Hachioji ..	45,288	9,137	5.0	Nagano ...	66,555	13,351	5.0
Hakodate..	163,972	33,318	4.9	Nagaoka ..	53,156	10,156	5.2
Hamamatsu	92,152	18,926	4.9	Nagasaki ..	189,071	40,560	4.7
Himeji	55,713	11,582	4.8	Nagoya ...	768,558	164,141	4.7
Hirosaki ..	36,293	6,552	5.5	Nara	48,879	10,469	4.7
Hiroshima..	195,731	42,866	4.6	Nawa	54,643	13,304	4.1
Ichinomiya.	34,746	7,035	4.9	Niigata ...	108,941	22,077	4.9
Imaharu ..	37,713	8,158	4.6	Nishinomiya	34,427	7,452	4.6
Kagoshima.	124,734	24,527	5.1	Numazu ..	38,042	6,977	5.4
Kanazawa .	147,420	32,455	4.5	Ogaki	33,639	7,065	4.8
Kawagoye..	31,905	6,507	4.9	Osaka	53,852	9,331	5.7
Kawasaki .	54,634	11,277	4.8	Okayama ..	124,521	28,005	4.4
Kiryu	42,553	8,374	5.1	Okazaki ...	44,556	10,052	4.4
Kishiwada..	32,050	7,153	4.5	Omuda	68,256	14,137	4.8
Kobe	644,212	151,505	4.3	Onomichi ..	27,740	6,554	4.2
Kochi	65,723	15,162	4.3	Osaka	2,114,804	483,990	4.4
Kofu	68,275	14,302	4.8	Otaru	134,469	26,556	5.1
Kokura ...	51,663	10,776	4.8	Otsu	33,779	7,824	4.3
Koriyama..	42,984	8,091	5.3	Saga	42,160	8,124	5.2
Kumamoto.	147,174	29,032	5.1	Sakai	105,009	23,145	4.5
Kure	138,863	29,872	4.7	Sapporo ...	145,065	28,726	5.0
Kurume ...	72,221	13,338	5.4	Saseho	95,385	18,038	5.3

Cities	Pop.	House-holds	Pop. per H.	Cities	Pop.	House-holds	Pop. per H.
Sendai	142,894	26,814	5.3	Ube	48,750	11,705	4.2
Shimizu . . .	46,339	9,053	5.1	Uji-Yamada	44,803	9,652	4.6
Shimonoseki	92,317	20,835	4.4	Utsunomiya	76,138	15,363	5.0
Shizuoka . .	84,772	16,524	5.1	Uwajima . .	38,534	8,723	4.5
Shuri	20,582	4,858	4.2	Uyeda	32,589	7,120	4.6
Takamatsu . .	71,897	15,895	4.5	Wakamatsu (Fukushima-ken)			
Takaoka . . .	42,660	8,300	5.1		41,982	7,756	5.4
Takasaki . . .	45,698	9,274	4.9	Wakamatsu (Fukuoka-ken)			
Takata	30,897	5,595	5.5		49,930	11,401	4.4
Tobata	37,748	8,393	4.5	Wakayama . .	95,385	21,517	4.4
Tokushima . .	74,545	16,946	4.4	Yamagata . .	55,994	10,023	5.6
Tokyo	1,995,567	429,852	4.6	Yawata . . .	118,376	27,079	4.4
Tottori	35,120	7,523	4.7	Yokkaichi . .	40,393	8,560	4.7
Toyama	67,490	14,453	4.7	Yokohama . .	405,888	95,377	4.3
Toyohashi . .	82,371	15,559	5.3	Yokosuka . .	96,351	18,429	5.5
Tsu	52,536	11,154	4.7	Yonezawa . .	44,602	8,196	5.4
Tsuruoka . .	31,830	6,103	5.2				

DISTRIBUTION OF URBAN AND RURAL POPULATION

Population	Result of the 1st Census Oct. 1, 1920			Result of the 2nd Census Oct. 1, 1925		
	No. towns	Pop.	Percentage	No. towns	Pop.	Percentage
Under 500	126	36,419	0.07	82	26,103	0.04
501- 2,000	2,662	4,007,310	7.21	2,545	3,854,410	6.45
2,001- 5,000	7,259	23,062,027	41.21	7,050	22,532,803	37.72
5,001- 10,000	1,639	10,821,175	19.34	1,733	11,470,200	19.20
10,001- 20,000	374	5,074,460	9.07	392	5,229,161	8.75
20,001- 50,000	136	4,102,746	7.33	145	4,437,992	7.43
50,001-100,000	31	2,105,318	3.76	51	3,444,916	5.77
Over 100,001	15	6,753,598	12.07	21	8,741,237	14.63
Total	12,243	55,963,053	100.00	12,019	59,736,822	100.00

JAPANESE RESIDING ABROAD

The following returns by the Foreign Department give data for October 1927 as follows:—

	Males	Females	Total
Grand total	387,810	288,452	676,262

I. Asia

Total	142,246	126,743	275,915
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District	Males	Females	Total
Manchuria	52,923	49,149	102,072
Kwantung	49,783	46,871	96,654
East Russia	1,189	311	1,500
Vladivostok	343	227	570
Nikol'sk	11	11	22
Petropavlovsk	21	4	25
Habarovsk & Nikolaevsk	96	3	99

POPULATION

47

District	Males	Females	Total
N. Saghalien	711	51	762
China	27,930	23,768	51,698
Tientsin	2,711	2,469	5,180
Peking	770	653	1,423
Tsinan	972	883	1,855
Chefoo	146	166	312
Shanghai	14,412	11,415	25,817
Hankow	534	311	845
Tsingtao	6,771	6,523	13,294
Canton	246	201	447
Amoy	147	124	271
Fuchou	149	145	294
Soochou	61	60	121
Swatou	79	85	164
Siam	154	93	247
French Indo-China	127	183	310
Netherlands India	2,903	1,611	4,514
Straits Settlements, Malay States and British N. Borneo	4,577	3,612	8,189
Hongkong	875	653	1,528
Singapore	2,167	1,147	3,314
Calcutta	130	57	187
Bombay	294	163	457
Batavia & Sourabaya....	2,903	694	3,597
Philippines	8,929	2,061	10,990
Manila	1,650	572	2,222

II. Europe

Total	2,595	575	3,170
District	Males	Females	Total
England	729	209	938
France	762	174	926
Germany	737	70	807
Italy	48	17	65
Switzerland	56	8	64
Belgium	53	23	76
Netherlands	19	11	30
U.S.S.R. (Russia)	50	24	74

III. North America

Total	104,024	62,370	166,398
District	Males	Females	Total
U.S.A.	88,153	52,556	140,709
California N.	39,901	24,417	64,318
San Francisco	4,648	3,649	8,297
California S.	28,691	16,807	45,498
Los Angeles	18,547	10,452	28,999
Seattle	4,620	3,127	7,747
Portland	4,310	3,000	7,310
New York	2,455	726	3,181

District	Males	Females	Total
Canada	12,894	8,261	21,159
Mexico	2,977	1,553	4,530
Panama & Cuba.....	794	164	958

N.B.—Figures for N. California are for 1926.

IV. South America

Total	50,602	34,001	84,683
District	Males	Females	Total
Brazil	36,996	28,193	65,189
Argentina	2,352	704	3,056
Peru	10,241	4,966	15,207
Bolivia	500	108	608
Chili	505	110	615

V. Africa

Total	50	35	85
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VI. Oceania

Total	79,412	62,264	141,676
District	Males	Females	Total
Japanese Mandate	5,588	3,131	8,719
Australia	1,814	246	2,060
Hawaiian Islands	70,573	58,814	129,387
Honolulu	19,922	17,818	37,740

JAPANESE GOING ABROAD

Number of Passports Issued in 1925-6

Destination	1926	1925	Destination	1926	1925
China	3,695	3,015	Africa	19	29
Slam	72	73	U. S. A.....	2,195	2,052
Hongkong	379	339	Canada	1,227	1,053
Br. Str. Settl'ts... 1,056	1,029		Mexico	482	330
Siberia	799	850	Peru	1,362	1,037
British India	954	270	Brazil	9,022	5,028
Fr. Indo-China ...	88	129	Argentina	209	226
Oceania	5	6	Chili	40	26
Asia	244	220	Australia	256	342
Cuba	129	190	Hawaii	1,269	1,159
Panama	19	35	Borneo	137	96
North America ...	178	104	Dutch Indies	954	270
South America ...	16	6	Philippines	2,656	2,137
Europe and America	854	864	Total incl. others..	28,618	22,176
Europe	707	780			

JAPANESE EMIGRANTS

According to the report of the Department of Foreign Affairs, the Japanese residing abroad were returned at 676,262 on October 1, 1927. Of that number about 150,000 reside in South Manchuria and China, but these are left out of account in describing the activity of Japanese living abroad. The following places are especially noteworthy as principal fields where the presence of Japanese emigrants is making itself felt.

Asiatic Russia

Harbin.—In the city and vicinity there are now about 4,190 Japanese, mostly petty traders, there being some 600 firm clerks and employes, the rest being their families. They organize themselves into a self-governing body, have their own elementary and other schools and also a hospital where Japanese and foreign patients are treated.

The Maritime Provinces.—The emigrants, about 500, are chiefly employed in fishing, packing business, etc. The total catches and tinned and salted articles, added to those of Kamchatka reach about 40 million yen a year. There live about 760 Japanese in Northern (Russian) Saghalien, generally employed in mining. Felling of timber and pulp-manufacturing are conducted by a Japanese syndicate organized by such leading paper mills in Japan as Okawa, Oji, Fuji, Mitsui, etc.

The South Seas and Hawaii

Malay Peninsula.—About 7,460 Japanese live in Singapore, Johore, and other states, about 450 being employed in rubber plantation either as planters or workers. They lease 120,000 acres of land, three quarters being under rubber trees at present. Besides there reside about 730 in British North Borneo and Sarawak.

Hawaiian Islands.—The emigrants number about 130,000, about one half of the total population in the group. In Honolulu and neighborhood alone there were at the end of 1927 about 37,740 including about 670 farm workers, 8,000 other laborers and over 1,500 petty tradesmen, and in other places roughly 20,000 engaged in farm work, generally on sugar plantations, while some are employed in coffee cultivation and fishery. They maintain 144 elementary schools and 8 middle schools for Japanese children.

The Philippines.—There are about 11,000 Japanese, nearly half of the number in the employ of the Mindanao Island Exploit. Co.'s plantations (some 60 in all). The Ohta Industrial Co. alone leases a tract of land covering about 25,000 acres there. Fishery in the Philippines is practically in the hands of Japanese. Those in the Sooloo Archipelago are nearly all pearl-fishers.

North and Central America

The United States and Canada.—About 35,000 Japanese on the eastern coast are engaged in farming, horticulture, fishing,

etc. Japanese in the "Imperial Valley" on the Mexican borderland and those in the Rocky Ford are raising common and water melons.

Mexico.—Over 600 emigrants are engaged in agriculture, chiefly cotton and coffee planting. The Nichi-Boku Kyodo Kaisha (Japan-Mexico Co-operation Co.) and Kobayashi-Kishimoto Partnership, for instance, own or lease respectively 12,253.200 and 1,960.512 acres of cultivated land, where about 250 Japanese are working as farm laborers. Over 500 Japanese are carrying on petty trade.

Cuba.—Cuba has now about 740 Japanese, mostly working as farm laborers.

South America

Japanese emigrants to S. America dates from 1899, when the first batch was sent to Peru by an emigration agency. Today there are about 15,200 Japanese emigrants in Peru, of whom about 2,000 are engaged in farming and other lines in the interior and the rest live in Lima as farm workers, petty traders, etc. Brazil has now the largest number of Japanese laborers, and there were living at the end of 1927 about 65,200, most of whom are leading happy and peaceful life at San Paulo where they own roughly 165,000 acres of farm, besides leasing about a quarter more. Japanese laborers being welcome for exploiting the boundless wild land in that vast country, it is considered by far the most desirable outlet for the congested population of Japan. A regular steamship service is run from Japan to Brazil. There are some 5,000 Japanese in other S. American places, as Argentina, Bolivia, Chili, etc. (See also "Emigration," Supplement.)

FOREIGN VISITORS TO JAPAN

Nationality	1928*	1927	1926	Nationality	1928*	1927	1926
Austria	21	21	30	Italy	30	119	86
Belgium	10	7	20	Norway	6	35	85
Britain	1,368	3,691	3,388	Philippines..	39	41	132
British-India	57	108	224	Poland	6	18	32
Canada	40	104	51	Portugal . . .	32	97	65
China	6,310	12,459	10,682	Russia	300	756	737
Czecho-slovakia . .	11	16	28	Spain	8	22	35
Denmark . . .	15	50	66	Sweden	19	102	43
France	115	342	422	Switzerland..	72	199	155
Germany . . .	265	548	512	U. S. A.	3,692	6,369	6,495
Holland	65	151	149	Total incl. others . . .	12,563	25,638	24,704

* Figures for 1st half.

FOREIGN RESIDENTS IN JAPAN

The number of foreign residents in various parts of this country for the ten years ending in 1926 is as follows:—

Year	Male	Female	Total
1922	17,242	7,690	24,932
1923	13,126	5,635	18,761
1924	17,537	6,585	24,122
1925	20,610	7,669	28,279
1926	22,483	8,657	31,140

The detailed figures for 1925 and 1926, tabulated according to nationality, are as follows, omitting those of less importance as to number:—

Nationality	1925	1926	Nationality	1925	1926
China	20,221	22,272	Norway	10	18
British-India	185	244	Portugal	171	160
Russia	1,176	1,364	Italy	66	99
Sweden	94	98	Switzerland	159	207
Great Britain	1,961	2,068	Germany	1,062	1,139
Denmark	106	115	Canada	133	148
Netherlands	86	99	United States	1,971	2,134
France	403	461	Total incl. others..	28,279	31,140

LEGAL STATUS OF FOREIGNERS

Landownership and Naturalization, etc.

With some exceptions of no great significance the foreigners living in Japan enjoy the same status as native subjects, so far as rights and privileges are concerned. At the same time the foreigners are just as amenable to the criminal laws and punitive provisions of the realm as the Japanese. The exceptions mentioned above relate first to mining concessions which are granted only to native subjects or to companies formed according to Japanese laws. Foreigners may therefore enjoy mining rights by becoming shareholders of a company so formed. Then certain companies or banks that stand in special relation to the Government, for instance, the subsidized steamship companies such as the Osaka Shosen Kaisha or the banks under special protection as the Bank of Japan, are not allowed to take foreigners as shareholders.

The Alien Landownership Right

This was first sanctioned in 1910 by law, but as the date for putting it into operation was left unfixed the law remained as dead letter. A new law voted in the 50th session of the Diet and promulgated on April 1, 1925, has replaced the original enactment, the measure being put to force on November 10, 1926. The law in question is essentially based on the spirit of reciprocity and recognizes the right of alien ownership as mutual concession. In other words, this right is extended only to citizens, either as individuals or as majority partners, shareholders, etc., of foreign juridical persons, of those foreign countries that recognize mutatis mutandis similar right of Japanese subjects. According to the law foreigners cannot own land or acquire superficies or emphyteusis in certain districts of strategic importance without permission of the Ministers of Army and Navy, such districts being designated in the ordinance relating to the

operation of the alien landownership law, promulgated on Nov. 1st, '26, in connexion with the enforcement of the said law.

Naturalization

A foreigner may become a Japanese subject under the following conditions, viz., (1) That he has been domiciled in Japan for at least five years continuously; (2) is at least 20 years of age and possesses civil capacity according to the law of his native country; (3) is of good morals; (4) possesses property or ability to maintain himself; (5) possesses no nationality or will lose it on being made a Japanese subject.

The above conditions are much modified for those whose fathers, mothers or wives were Japanese subjects, and for those who were born in Japan of either Japanese father or mother. Those who are living in Japan for ten years or more may be naturalized even when they are not domiciled for five consecutive years, while for those of distinguished service to Japan the process of naturalization may, with Imperial sanction, be made very simple, i.e., continuous residence or domicile in Japan for at least one year and good morals. The nationality can also be acquired by being adopted by a Japanese subject. Naturalizations still remain comparatively insignificant in number, the bulk being supplied by Chinese living in Formosa.

Year	Marrying into family	Adopt- ed	Natur- alized	Rehab- ilitated	Year	Marrying into family	Adopt- ed	Natur- alized	Rehab- ilitated
1921....	—	4	8	9	1924....	1	2	4	5
1922....	—	—	8	—	1925....	1	2	7	3
1923....	—	—	1	—	1926....	4	7	7	4

EXPATRIATION OF JAPANESE

Japan did not recognize till 1916 the expatriation of her sons or daughters who acquired foreign citizenship, excepting those females who married foreign subjects. The result was the Japanese who legally became American citizens, for example, still figured on Japanese census register so that they stood on the peculiar status of double nationality. This procedure was at last changed and the Law of Nationality was revised, to become operative in Aug. 1916. The law was further amended in December 1924 and the foreign countries to which the expatriation applies was designated to be, 1. U.S.A., 2. Argentina, 3. Brazil, 4. Canada, 5. Chili, 6. Peru. It may be noted that those American or Canadian-born Japanese boys not yet expatriated are still technically liable to the Japanese conscription law, so that the crux of "double nationality" question remains unsolved, as is also the case with the Prussian or French boys born in America.

CHAPTER V

IMPERIAL COURT

(ALSO DECORATIONS, PEERS, ETC.)

Reigning Sovereign

His Imperial Majesty Hirohito, the 124th Emperor of Japan, was born on April 29th, 1901, and is the first living son of the late Emperor Taisho. His Majesty was proclaimed Crown Prince on September 9th, 1902; appointed Captain of the Army and Lieutenant of the Navy in 1916; to be promoted to Lieutenant-Colonel and Commander in 1923 and Colonel and Captain in 1925; visited Europe in 1921; appointed Regent in November, 1921, on account of the illness of his father Emperor Taisho; ascended the Throne on December 25th, 1926. Married Princess Nagako on Jan. 26th, 1924.

Nagako, the Empress, the daughter of Prince Kuni, was born on March 6th, 1903.

Shigeko Teru-no-miya, first daughter of the Emperor, was born on Dec. 6th, 1925.

[Sachiko Hisa-no-miya, second daughter of the Emperor, was born on September 10th, 1927. Died on March 8th, 1928.]

Sadako, the Empress Dowager, born on June 25th, 1884, is the 4th daughter of the late Prince Kujo, a noble of the first rank; married the Emperor Taisho on May 10th, 1900.

Brothers of the Emperor

Yasuhito, Chichibu-no-miya, 2nd son of Emperor Taisho, born June 25th, 1902; on his attaining majority in 1922, founded a new house by Imperial order; graduated from the Military Academy in July, 1922; appointed Sub-Lieutenant in October the same year, promoted to Lieutenant in '25; is now Captain attached to the Imperial Guard Division. Went to England for study leaving Japan on May 24, '25 and after studying at Oxford returned home in January 1927, owing to the illness of his father Emperor Taisho. Married Miss Setsuko Matsudaira, daughter of Tsuneo Matsudaira, (ex-Ambassador to Washington) on September 28, 1928.

Nobuhito, Takamatsu-no-miya, 3rd son of Emperor Taisho, born Jan. 3rd, 1905; graduated from the Naval Academy in May, '24; appointed 2nd Sub-Lieutenant of Navy, Dec. '25; studied at the Torpedo School '25-26; studied aeronautics at the naval aviation institution at Kasumiga-ura '27 and then gunnery at the Naval Gunnery School; is now an officer on board the training ship Yakumo.

Takahito, Sumi-no-miya, 4th son of Emperor Taisho, was born Dec. 2nd, 1915.

Sisters of the late Emperor Living

Masako, Princess Tsune, married Prince Takeda April 27th, 1908; widow 1919.

Fusako, Princess Kane, married Prince Kitashirakawa April 29th, 1909; visited Europe in 1922; widow 1923.

Nobuko, Princess Fumi, married Prince Asaka May 9th, 1910.

Toshiko, Princess Yasu, married Prince Higashi-Kuni May 18th, 1915.

IMPERIAL FAMILIES

Fushimi.—The House is the oldest of the princely families having been founded in the 14th century by a son of Gohanazono Tenno, the 102nd Emperor.

Prince **Hiroyasu**, head, 22nd of the line, 1st son of late Prince **Sadanaru**; born Oct. 16th, 1875; succeeded to the House of Prince **Kwacho** April 23rd, 1883, but returned to the present House on Jan. 19th, 1904; studied in the Naval Academy and in Germany; was wounded on board the *Mikasa* in the Battle of Yellow Sea, Aug., 1904; studied in England 1909-10; Captain of the *Takachiho* 1910; Vice-Adm. '17; Adm. in '22; War Councillor in '20. Res. *Kioi-cho*, *Kojimachi*, Tokyo.

Princess **Tsuneko**, consort of Prince **Hiroyasu**, daughter of the last Shogun, was born Sept. 23rd, '82; married Jan. 9th, '96. Issue:—Four sons and three daughters.

Prince **Hiroyoshi**, the first son of Prince **Hiroyasu**, born '97; is Lieutenant of the Navy; married Princess **Tokiko**, daughter of Prince **Ichijo**, in 1919.

Princess **Tokiko**, consort of the above, 2nd daughter of Prince **Ichijo**, born in 1903.

Prince **Hironobu**, 3rd son of Prince **Hiroyasu**, born in 1905, was ordered to set up a new house as Marquis **Kwacho** in '26 by Emperor Taisho; graduated from the Naval Academy in July, 1925, and is now Sub.-Lieutenant.

Prince **Kunika**, 2nd son of the late Prince **Sadanaru**; was born in 1880. Res. *Nakano*, Tokyo.

Kan-in.—The House was founded by Prince **Naohito** (1703-52 A.D.), eldest son of the 114th Emperor. Prince **Kotohito**, head, 16th son of Prince **Kunliye Fushimi** and younger brother of Prince **Sadanaru Fushimi**, was born Sept. 22nd, 1865; studied at the Military Preparatory School '77-81 and at French Military School, '82-91; Lieut.-Col. (Cav.), '95; Lieut.-General '05; Div. Commander, 1906; full General and Supreme War Councillor, '12; Marshal, '19; is Hon. President of the Japan Red Cross Society. Accompanied the Crown Prince to Europe in '21. Res. *Nagata-cho*, *Kojimachi*, Tokyo.

Princess **Chieko**, consort, 2nd daughter of the late Prince **Sanetomi Sanjo**, was born May 25th, 1872; married the Prince Dec. 19th, 1891.

Issue:—A son and four daughters.

Prince **Haruhito**, 2nd son of Prince **Kotohito**, was born Aug.

3rd, 1902; studied at the Military Academy; Sub-Lieutenant of Cavalry attached to the Guard Division '24. Married Princess Naoko, daughter of the late Prince Saneteru Ichijo, in July '26.

Princess Naoko, consort of the above, 4th daughter of the late Prince Saneteru Ichijo.

Higashi-Fushimi.—The House was founded by the late Adm. Prince Yorihiro, younger brother of Princes Fushimi and Kan-in, and 17th son of the late Prince Kuniya Fushimi. The Prince died heiress in 1922.

Dowager Princess Kaneko, 1st daughter of the late Prince Tomosada Iwakura, was born Aug. 29th, 1876; married in Feb. 1898. Res. Tokiwamatsu, Shimoshibuya, Tokyo.

Prince Kunihide, adopted heir, 3rd son of Prince Kuniyoshi Kuni, was born May 16th, 1910.

Kwacho.—The House became extinct after the demise of Prince Hirohito Kwacho, 4th of the line, who succeeded to the House as its head in 1904, he dying in March, 1924, leaving no issue.

Yamashina.—Prince Takehiko, 3rd of the line, head, 1st son of the late Prince Kikumaro; was born Feb. 13th, 1898; studied in the Naval Academy; attached to the Naval Aviation Corps as Sub-Lieutenant '21; Lieutenant and attached to the Naval Board of Command '25; retired from active service '27 owing to declined health; has three brothers and one sister, who married in '21 Nagatake Asano, heir of Marquis Asano. Taking great interest in aviation established the Mikuni Aviation School in 1925. Married Princess Sakiko (died Sept., 1923), 2nd daughter of the late Prince Kuniyoshi Kaya. Res. Fujimi-cho, Kojimachi, Tokyo.

Dowager Princess Hisako, mother, 3rd daughter of the late Prince Tadayoshi Shimazu; was born Feb. 7th, 1874; married the late Prince Kikumaro Nov. 26th, 1902; widow '08.

His 4 brothers are Prince Yoshimaro, born 1901, Prince Fujimaro, 1905, Prince Hagimaro, 1906, and Prince Shigemaro, 1908. Prince Yoshimaro (Lieutenant of Army) was ordered to set up a new house in '20 as Marquis Yamashina; Prince Fujimaro and Prince Hagimaro (Navy Lieutenant) also ordered to set up new houses in '28 as Marquis Tsukuba and Count Kashima respectively.

Kaya.—Prince Tsunenori, 2nd of the line, head, 1st son of the late Prince Kuninori; was born Jan. 27th, 1900; grad. from the Army Cadets School in '21 and the Military Staff College in '26; Captain of Cavalry attached to 3rd cavalry regiment; married Princess Toshiko in '21. The Prince has two sisters. Res. Ichiban-cho, Kojimachi, Tokyo.

Princess Toshiko, consort, 5th daughter of Prince Kujo; was born May 26th, 1903.

Issue:—Two sons and a daughter.

Dowager Princess Yoshiko, eldest daughter of the late Marquis Daigo; was born Oct. 20th, 1865; married the late Prince '92; widow 1910.

Kuni.—Prince Kuniyoshi, 2nd of the line, head, 3rd son of the late Prince Asahiko; was born July 23rd, 1873; Sub-Lieut. 1897; was attached to Gen. Kuroki's staff during the Russo-Japanese

War as Major (Inf.); Colonel in '08; studied in Germany '07-10; Maj.-Gen. '18; Lt.-Gen. '18; full Gen. '23; Supreme War Councillor. Res. Shimo-Shibuya, Tokyo.

Princess Chikako, consort, 7th daughter of the late Prince Tadayoshi Shimazu; was born Oct. 19th, 1879; married Dec. 13th, 1899; travelled through Europe '09-10.

Issue:—Three sons and three daughters.

Prince Asa-akira, 1st son, born 1900; Lieutenant of the Navy; married Princess Tomoko, 3rd daughter of Prince Hiroyasu Fushimi on January 26th, 1925. His sister Princess Nagako is now the Empress. His younger brother Prince Kunihide is the adopted heir of the House of Higashi Fushimi.

Prince Taka, 5th son of the late Prince Asahiko; was born 1875 in Kyoto; Acting Grand Custodian of the Great Shrine of Ise; married in 1905 Lady Shizuko, daughter of Viscount Minase. Res. Kyoto.

Issue:—Three sons and three daughters.

Nashimoto.—**Prince Morimasa**, 2nd of the line, General and Supreme War Councillor; 4th son of the late Prince Asahiko; born March 9th, 1874; Sub-Lieut. 97; on the outbreak of the 1904-5 War he hurried back from France where he was studying at a military academy; was attached to General Oku's staff as Capt. of Infantry; Major 1906; studied in Europe Apr. 1907 to July, 1908; Lieut.-Col. '08; Colonel '10; Full Gen. Aug. '23; then Supreme War Councillor. Res. Aoyama Kita-machi, Tokyo.

Princess Itsuko, consort, 2nd daughter of Marquis Nabeshima; was born Feb. 2nd, 1882; married Nov. 28th, 1900; made tour in Europe '08-09.

Issue:—2 daughters. **Princess Masako** (1st daughter) married in '20 Prince Yi Kon, younger brother of the late Prince Yi Chlok and then Heir of the Royal House of Korea.

Kitashirakawa.—**Prince Nagahisa**, 4th of the line, eldest son of the late Prince Narihisa; was born Feb. 19, 1910; succeeded to the title on the death of his father in Paris in 1923. Is studying at the Peers' School. Has three sisters. Res. Takanawa, Tokyo.

Dowager Princess Tomiko; mother of the late Prince Narihisa, adopted daughter of the late Prince Hisamitsu Shimazu; was born Aug. 8th, 1862; widow in 1895.

Dowager Princess Fusako, consort of the late Prince Narihisa, was born 1890, 7th daughter of the Emperor Meiji.

Takeda.—The House was newly created on March 30th, 1906, by the late Prince Tsunehisa (died in '03), eldest son of the late Prince Yoshihisa Kitashirakawa. **Prince Tsuneyoshi**, 2nd of the line, eldest son of the late Prince Tsunehisa; was born in 1909; has a sister. Res. Takanawa Minami-cho, Tokyo.

Dowager Princess Masako, 6th daughter of the late Emperor Meiji; was born Sept., 1888; married the late Prince Tsunehisa in 1903; widow '19.

Asaka.—**Prince Yasuhiko**, Colonel of Infantry; was born '87; 8th son of the late Prince Kuni, the House having been newly created on March 30th, '06; studied in Europe '22-25; married Princess Nobuko in 1909. Appointed Instructor in the Military Staff College in June '26. Res. Takanawa Minami-cho, Tokyo.

Princess Nobuko, consort, 8th daughter of the Emperor Meiji, born Aug. 7th, 1891; visited Europe and U.S.A. in '25.

Issue:—Two sons and two daughters.

Higashi-Kuni.—Prince **Naruhiko**, Colonel of Infantry, 9th son of the late Prince Kuni; was born '87 in Kyoto. Was ordered by Emperor Meiji on Nov. 2nd, '06, to set up the House; married Princess Toshiko in May, 1915; went to France for study in 1920 and after about seven years' absence returned home in January, 1927, owing to the death of the Emperor Taisho. Res. Ichibei-cho, Azabu, Tokyo.

Princess Toshiko, consort, youngest daughter of the Emperor Meiji; born May 11th, 1896.

Issue:—Two sons.

Royal House of Korea

Yi, the former royal family of Korea. Prince **Kon**, head, brother of Prince Chlok, the late head of the house. Was born Oct. 20th, 1897. Grad. from the Military Academy in Tokyo; Captain of Infantry and attached to the General Staff Office. Married Princess Masako in 1920. Visited Europe in 1927 for study and observation, accompanied by Princess Masako. Res. Roppongi, Azabu, Tokyo.

Princess Masako, consort of the above, eldest daughter of Prince Nashimoto, was born Nov. 4th, 1901.

Princess Im, consort of the late Prince Yi, was born Sept. 19, 1894; widow in 1926. Res. Seoul, Chosen.

Princess Tokukei, sister to the head, born May 25th, 1912. Is studying at the Peeresses School, Tokyo.

Prince **Yi Kang**, 5th son of the late Grand Prince Yi and elder brother to the head; was born March 30th, 1877. Married Lady Kim Dec. 1893. Attached to the Chosen Army Headquarters. Res. Seoul, Chosen.

Issue:—Two sons.

THE IMPERIAL HOUSE LAW

(Promulgated on February 11, 1889).

Chapter I. Succession to the Imperial Throne

Art. I.—The Imperial Throne of Japan shall be succeeded to by male descendants in the male line of Imperial Ancestors.

Art. II.—The Imperial Throne shall be succeeded to by the Imperial eldest son.

Art. III.—When there is no Imperial eldest son, the Imperial Throne shall be succeeded to by the Imperial eldest grandson. When there is neither Imperial eldest son nor any male descendant of his, it shall be succeeded to by the Imperial son next in age, and so on in every successive case.

Art. IV.—For succession to the Imperial Throne by an Imperial descendant, the one of full blood shall have precedence over descendants of half blood. The succession to the Imperial Throne

by the latter shall be limited to those cases only in which there is no Imperial descendant of full blood.

Art. V.—When there is no Imperial descendant, the Imperial Throne shall be succeeded to by an Imperial brother and by his descendants.

Art. VI.—When there is no such Imperial brother or descendant of his, the Imperial Throne shall be succeeded to by an Imperial uncle and his descendants.

Art. VII.—When there is neither such Imperial uncle nor descendant of his, the Imperial Throne shall be succeeded to by the next nearest member among the rest of the Imperial Family.

Art. VIII.—Among the Imperial brothers and the remoter Imperial relations, precedence shall be given, in the same degree, to the descendants of full blood, and to the elder over the younger.

Art. IX.—When the Imperial heir is suffering from an incurable disease of mind or body, or when any other weighty cause exists, the order of succession may be changed in accordance with the foregoing provisions, with the advice of the Imperial Family Council and with that of the Privy Council.

Chapter II. Ascension and Coronation

Art. X.—Upon the demise of the Emperor, the Imperial heir shall ascend the Throne and shall acquire the Divine Treasures of the Imperial Ancestors.

Art. XI.—The ceremonies of Coronation shall be performed and a Grand Coronation Banquet (*Daijosai*) shall be held at Kyoto.

Art. XII.—Upon an ascension to the Throne, a new era shall be inaugurated, and the name of it shall remain unchanged during the whole reign in agreement with the established rule of the 1st year of Meiji.

Chapter III. Majority, Institution of Empress and of Heir-Apparent

Art. XIII.—The Emperor, the Kotalshi, and the Kotalson shall attain their majority at eighteen full years of age.

Art. XIV.—Members of the Imperial Family, other than those mentioned in the preceding article, shall attain their majority at twenty full years of age.

Art. XV.—The son of the Emperor who is Heir-apparent, shall be called "Kotalshi." In case there is no Kotalshi, the Imperial grandson who is Heir-apparent shall be called "Kotalson."

Art. XVI.—The Institution of Empress and that of Kotalshi or of Kotalson shall be proclaimed by an Imperial Rescript.

Chapter IV. Styles of Address

Art. XVII.—The style of address for the Emperor, the Grand Empress Dowager, the Empress Dowager, and of the Empress,

shall be "His," or "Her," or "Your Majesty."

Art. XVIII.—The Kotalshi and his consort; the Kotalson and his consort; the Imperial Princes and their consorts, and the princesses shall be styled "His," "Her," "Their," or "Your Highness" or "Highnesses."

Chapter V. Regency

Art. XIX.—When the Emperor is a minor a Regency shall be instituted. When he is prevented by some permanent cause from personally governing, a Regency shall be instituted, with the advice of the Imperial Family Council and with that of the Privy Council.

Art. XX.—The Regency shall be assumed by the Kotalshi or the Kotalson, being of full age of majority.

Art. XXI.—When there is neither Kotalshi nor Kotalson, or when the Kotalshi or Kotalson has not yet arrived at his majority, the Regency shall be assumed in the following order:—

1. An Imperial Prince or a Prince.
2. The Empress.
3. The Empress Dowager.
4. The Grand Empress Dowager.
5. An Imperial Princess or a Princess.

Art. XXII.—In case the Regency shall be assumed from among the male members of the Imperial Family, it shall be done in agreement with the order of succession to the Imperial Throne. The same shall apply to the case of female members of the Imperial Family.

Art. XXIII.—A female member of the Imperial Family chosen to assume the Regency shall be exclusively one who has no consort.

Art. XXIV.—When, on account of the minority of the nearest related member of the Imperial Family, or for some other cause, another member has to assume the Regency, the latter shall not, upon the arrival at majority of the above mentioned nearest related member, or upon the disappearance of the aforesaid cause, resign his or her post in favour of any person other than of the Kotalshi or of the Kotalson.

Art. XXV.—When a Regent or one who should become such, is suffering from an incurable disease of mind or body, or when any other weighty cause exists therefor, the order of the Regency may be changed, with the advice of the Imperial Family Council and with that of the Privy Council.

Chapter VI. The Imperial Governor

Art. XXVI.—When the Emperor is a minor, an Imperial Governor shall be appointed to take charge of His bringing up and of His education.

Art. XXVII.—In case no Imperial Governor has been nominated in the will of the preceding Emperor, the Regent shall appoint one, with the advice of the Imperial Family Council and with that of the Privy Council.

Art. XXVIII.—Neither the Regent nor any of his descendants can be appointed Imperial Governor.

Art. XXIX.—The Imperial Governor can not be removed from his post by the Regent, unless upon the advice of the Imperial Family Council and upon that of the Privy Council.

Chapter VII. The Imperial Family

Art. XXX.—The term "Imperial Family" shall include the Grand Empress Dowager, the Empress Dowager, the Empress, the Kotalshi and his consort, the Kotalson and his consort, the Imperial Princes and their consorts, the Imperial Princesses, the Princesses and their consorts, and the Princesses.

Art. XXXI.—From Imperial sons to Imperial great-grand-sons, Imperial male descendants shall be called Imperial Princes; and from Imperial daughters to Imperial great-grand-daughters Imperial female descendants shall be called Imperial Princesses. From the fifth generation downwards, male descendants shall be called Prince and females Princesses.

Art. XXXII.—When the Imperial Throne is succeeded to by a member of a branch line, the title of Imperial Prince or Imperial Princess shall be specially granted to the Imperial brothers and sisters, being already Princes or Princesses.

Art. XXXIII.—The birth, namings, marriages, and deaths in the Imperial Family shall be announced by the Minister of the Imperial Household.

Art. XXXIV.—Genealogical and other records relating to the matters mentioned in the preceding Article shall be kept in the Imperial archives.

Art. XXXV.—The members of the Imperial Family shall be under the control of the Emperor.

Art. XXXVI.—When a Regency is instituted, the Regent shall exercise the power of control referred to in the preceding Article.

Art. XXXVII.—When a member, male or female, of the Imperial family is a minor and has been bereft of his or her father, the officials of the Imperial Court shall be ordered to take charge of his or her bringing up and education. In certain circumstances, the Emperor may either approve the guardian chosen by his or her parent, or may nominate one.

Art. XXXVIII.—The guardian of a member of the Imperial Family must be himself a member thereof and of age.

Art. XXXIX.—Marriages of members of the Imperial Family shall be restricted to the circle of the Family, or to certain noble families specially approved by Imperial Order.

Art. XL.—Marriages of the members of the Imperial Family shall be subject to the sanction of the Emperor.

Art. XLI.—The Imperial writs sanctioning the marriages of the members of the Imperial Family, shall bear the counter-signature of the Minister of the Imperial Household.

Art. XLII.—No member of the Imperial Family can adopt any one as his son.

Art. XLIII.—When a member of the Imperial Family wishes

to travel beyond the boundaries of the Empire, he shall first obtain the sanction of the Emperor.

Art. XLIV.—A female member of the Imperial Family, who has married a subject, shall be excluded from membership of the Imperial Family. However, she may be allowed, by the special grace of the Emperor, to retain her title of Imperial Princess or Princess, as the case may be.

Chapter VIII. Imperial Hereditary Estates

Art. XLV.—No landed or other property, that has been fixed as the Imperial Hereditary Estates, shall be divided up and alienated.

Art. XLVI.—The landed or other property to be included in the Imperial Hereditary Estates shall be settled by Imperial writ with the advice of the Privy Council, and shall be announced by the Minister of the Imperial Household.

Chapter IX. Expenditures of the Imperial House

Art. XLVII.—The expenditures of the Imperial House of all kinds shall be defrayed out of the National Treasury at a certain fixed amount.

Art. XLVIII.—The estimates and audit of accounts of the expenditures of the Imperial House and all other rules of the kind, shall be regulated by the Finance Regulations of the Imperial House.

Chapter X. Litigations, Disciplinary Rules for the Members of the Imperial Family

Art. XLIX.—Litigation between members of the Imperial Family shall be decided by judicial functionaries specially designed by the Emperor to the Department of the Imperial Household, and execution issued after Imperial sanction thereto has been obtained.

Art. L.—Civil actions brought by private individuals against members of the Imperial Family, shall be decided in the Court of Appeal in Tokyo. Members of the Imperial Family shall, however, be represented by attorneys, and no personal attendance in the Court shall be required of them.

Art. LI.—No members of the Imperial Family can be arrested, or summoned before a Court of Law, unless the sanction of the Emperor has been first obtained thereto.

Art. LII.—When a member of the Imperial Family has committed an act derogatory to his (or her) dignity, or when he has exhibited disloyalty to the Imperial House, he shall, by way of disciplinary punishment and by order of the Emperor, be deprived of the whole or a part of the privileges belonging to him as a member of the Imperial Family, or shall be suspended therefrom.

Art. LIII.—When a member of the Imperial Family acts in a way tending to the squandering of his (or her) property, he shall be pronounced incapable by the Emperor, prohibited from

administering his property, and a manager shall be appointed therefor.

Art. LIV.—The two foregoing Articles shall be enforced upon the advice of the Imperial Family Council.

Chapter XI. The Imperial Family Council

Art. LV.—The Imperial Family Council shall be composed of the male members of the Imperial Family, who have reached the age of majority. The Lord Keeper of the Privy Seal, the President of the Privy Council, the Minister of the Imperial Household, the Minister of State for Justice, and the President of the Court of Cassation shall be ordered to take part in the deliberations of the Council.

Art. LVI.—The Emperor personally presides over the meetings of the Imperial Family Council, or directs one of the members of the Imperial Family to do so.

Chapter XII.—Supplementary Rules

Art. LVII.—Those of the present members of the Imperial Family of the fifth generation and downwards, who have already been invested with the title of Imperial Prince, shall retain the same as heretofore.

Art. LVIII.—The order of succession to the Imperial Throne shall in every case relate to the descendants of direct lineage. There shall be no admission to this line of succession to any one, as a consequence of his now being an adopted Imperial son, Koyushi or heir to a princely house.

Art. LIX.—The grades of rank among the Imperial Princes and Princesses shall be abolished.

Art. LX.—The family rank of Imperial Princes and all usages conflicting with the present law shall be abolished.

Art. LXI.—The property, annual expenses, and all other rules concerning the members of the Imperial Family, shall be specially determined.

Art. LXII.—When in the future it shall become necessary either to amend or make addition to the present law, the matter shall be decided by the Emperor, with the advice of the Imperial Family Council and with that of the Privy Council.

Additional Rules (Promulgated on February 11, 1907)

Art. I.—The princes may be created peers, either by order of the Emperor or at their own wishes, with family names to be granted by the Emperor.

Art. II.—The Princes may, with the sanction of the Emperor, become heirs of peers or be adopted as their sons with a view to becoming their heirs.

Art. III.—The consorts, lineal descendants and their wives, of the Princes who have been excluded from membership of the Imperial Family for the reason stated in the two foregoing Articles are also excluded from membership of the Imperial

Family as members of the families of the Princes who have become subjects. The rule does not, however, apply to those female members of the Imperial Family who have married other members of the Imperial Family or their lineal descendants.

Art. IV.—A member of the Imperial Family, who has been deprived of the privileges belonging to him as a member of the Imperial Family, may be excluded from membership of the Imperial Family and placed in the rank of subjects by order of the Emperor. The consort of a member of the Imperial Family who has been excluded from membership of the Imperial Family and placed in the rank of subjects in accordance with the foregoing Article is also excluded from membership of the Imperial Family and placed in the rank of subjects.

Art. V.—In the cases mentioned in Arts. I, II and IV (of the present additional rules), the matter shall be decided with the advice of the Imperial Family Council and that of the Privy Council.

Art. VI.—Those members of the Imperial Family, who have been excluded from membership of the Imperial Family, can not be reinstated as members of the Imperial Family.

Art. VII.—Regulations pertaining to the legal status of the members of the Imperial Family and the limits of their competence, other than those provided for elsewhere in the present law, shall be defined separately. Regarding the affairs in which are involved the interests of a member of the Imperial Family and a subject or subjects and in which different regulations apply to the respective parties, such regulations shall apply.

Art. VIII.—Those provisions of laws and ordinances designated as applicable to the members of the Imperial Family shall apply to them only in cases where no particular regulations are specifically provided for in the present law or such regulations as are issued in accordance with the present law.

Additional Rules (Promulgated on November 28, 1908)

A female member of the Imperial Family can marry a male member of Ozoku or Kozoku (former Royal Family of Korea).

THE IMPERIAL PROPERTY LAW

The Law as gazetted in Dec. 1910 and put in force in January the following year provides that the land and other property belonging to the Emperor is divided into hereditary and personal property, and that for all the judicial proceedings affecting the property the Minister of the Imperial Household is held responsible. The ordinary civil or commercial law is applicable to the property only when it does not conflict with the Imperial House Law and the present law. No hereditary landed estate can be newly used for any other purpose except those of public utility, or undertakings sanctioned by the Emperor. The property of the members of the Imperial House is subject to levy when it does not conflict with the Imperial House Law or the present law. However, this does not apply to the estates belonging to the Grand Empress Dowager, Empress Dowager, Empress,

Heir Apparent, his consort, eldest son and that son's consort, and other unmarried members of the Imperial Family who have not yet attained their majority.

PROPERTY OWNED BY THE IMPERIAL COURT

The Court owned as in Oct. 1920, 1,531,200 cho (about 3,800,000 acres) of building land, forests and plains, ordinary property, altogether valued by the Census Board at ¥637,234,000. There were besides buildings (34,103,000), household effects and furniture (34,103,000), cattle (705,000) and other items (21,132,000), the two making a sum of ¥727,277,000. Then the Court owns shares of the Bank of Japan, the Yokohama Specie Bank, the Industrial Bank of Japan, the Formosan Bank, the Nippon Yusen Kaisha, and many other kinds including Imperial Hotel shares, all these coming up to hundreds of millions of yen. The Court has decided in consideration of the food question and so forth, to sell or otherwise transfer to private or public ownership part of the Imperial estates. In Aug. 1921, such transfer was made to the extent of 118,065 cho of land and forest, about 36.6% of the total area of the hereditary land.

The civil list that had long remained stationary at ¥3 millions was increased to 4½ millions in 1910.

IMPERIAL MAUSOLEA AND TOMBS

In conformity with the principle of the ancestor-worship cult observed both by Court and people, special attention is devoted by the Imperial Household to preserving and keeping in due repair the mausolea and tombs of the Emperors and members of the Imperial family. These number over 2,000 counting from the founding of the country, but the resting places of only 490 of them have been identified or officially fixed, including the "three deities" of the "age of gods," 198 mausolea for 115 Emperors, 8 crowned Empressess, 48 Empress-consorts, 3 Empress-Dowagers, and so on.

DECORATIONS

Eight kinds exist, namely the Grand Cordon and the Grand Order of the Chrysanthemum granted only to holders of the Grand Order of Merit, the Grand Cordon of the Rising Sun and Paulownia granted to holders of 1st class Merit, Order of the Rising Sun (1st-8th grade), Order of the Sacred Treasure (1st-8th grade), Order of the Crown (1st-8th grade and only for women), Order of Paulownia (1st-8th grade), and lastly the military Order of the Golden Kite (1st-7th grade).

The Golden Kite carries an annuity, ranging from 1,500 yen a year granted to a holder of the 1st grade and 100 yen granted to a holder of the 7th and lowest class.

Then there are the Blue-ribbon medal conferred on ordinary people who distinguish themselves in the cause of public utility; the Green-ribbon medal to be conferred on those distinguished for filial piety, and the Red-ribbon medal to be conferred on

those who rescue human lives at the peril of their own.

The Grand Order of Merit and Grand Cordon of the Chrysanthemum, the highest honor accessible to Japanese, have been granted to the following personages exclusive of Imperial Princes and mentioning only those who are alive:—

Holder of the Grand Order

Prince Yi Kon; Prince Yi Kang; Prince Salonji; Admiral Count Togo.

Holders of the 1st Class Golden Kite Alive

Admiral Count Togo; Admiral Count Yamamoto; Marshal Count Oku; General Oi.

Number of Decorations and Holders thereof

Order Merit	Chry'mum	Paulow- nia	Rising Sun	Sacred Treasure	Crown	Golden Kite*	No. of Holders
G.C.	2	—	—	—	—	—	2
C.	13	—	—	—	—	—	11
1st	—	33	134	187	18	5	315
2nd	—	—	380	757	18	47	916
3rd	—	—	1,076	4,969	2	287	5,024
Total with lower grades	13	26	673,460	454,218	2,038	65,663	1,129,873

Note—*=Military honor. G.C.=Grand Cordons with Collar. C=Grand Cordons.

Note—Those holding more than one order being counted by the highest order they wear, the actual number of orders does not agree with that of holders.

THE PEERAGE AND RANKS

Though the Peerage as a distinct social rank dates only from 1884, it practically existed from ancient times, courtiers or Kuge and feudal princes or Daimyo of olden days corresponding to the Peers of today. The Peerage is divided into five grades, viz. Prince, Marquis, Count, Viscount, and Baron. There is no intermediate rank corresponding to the British baronetcy. By origin the Japanese Peers may be classified into four distinct groups, i.e., those who are descendants of the former courtiers or Kugé; descendants of the former Daimyo; those created Peers in recent times, and finally Korean Peers who were created after the annexation. The number of Peers is as follows:—

	Prince	Marquis	Count	Viscount	Baron	Total
1927	19	39	105	381	409	953

Note—Korean Peers are excluded here (vid. Ch. on Chosen).

Hereditary Privilege.—Japan has no life-peers, all the Peers being hereditary. A nobleman may be degraded either by his voluntary surrender of the honor or by order of the Court, when

he disgraces the rank. Cases of lapsing of the title owing to the successor of a deceased Peer not being reported within one year have been very rare; such practice was even considered as disrespectful to the Court. So far only a few such cases have occurred, the report being purposely withheld.

Court Ranks.—Japan, copying from China, possesses a peculiar system of nominal honors awarded to persons of meritorious service, mostly public servants. It is called "ikal" or "kurai," and is generally translated as "Court rank." Graded into eight classes, each of a senior and a junior degree, this "ikal" is given only to Japanese subjects, and serves to determine precedence, when there are no decorations or other conventional marks to settle it. Thus a holder of a senior degree of the 3rd grade of "ikal" is entitled to take precedence over one whose "ikal" is a junior degree of the grade. A Peer bears as a matter of course "ikal" differing according to his rank, a 4th grade for a Baron, for instance. A large number of wealthy merchants possess "ikal" generally in consideration of their contributions of money for public purposes.

Posthumous Honors.—The peculiar custom of conferring posthumous honors still lingers in Japan though it was abolished years ago in China, the country of its origin. The idea is based on the principle of ancestorworship. Theoretically the honor is a parting gift to one on his death bed, and is granted with this official announcement: "Promoted by one degree for special consideration." In practice the honor is posthumous, as it usually comes after the death of the beneficiary. Japanese of exalted rank have therefore two different dates of death, i.e. physiological dissolution and official death. This is hardly consistent with historical accuracy, while the practice may prove highly perplexing to the attending physicians. What is still more interesting is that notable persons dead several centuries before are sometimes honored in this way.

The granting of a peerage has also occasionally been posthumous, and a Barony that is conferred on a distinguished man on his death-bed or after his death, falls to his heir.

IMPERIAL PROTECTION OF THE PEERS

The protection accorded by the Court to Peers of the Kuge extraction has been munificent, as might well be expected from the miserable existence which they had to endure in common with their Imperial masters for several centuries. On the occasion of the silver wedding of the Emperor and Empress Meiji in 1894 and of the death of the Empress Dowager in 1897, monetary grants were made to the Kugé courtiers, the two grants totalling about ¥2,500,000. The recipients numbered 5 Princes, 12 Marquises, 31 Counts, and 82 Viscounts. The fund was kept in custody of the Imperial Household, only the interest being distributed twice a year. It was first intended to distribute the principal in 1923, but this has been postponed till 1946. In February, 1919, the regulations were revised allowing the Peers to get a loan out of the fund.

CHAPTER VI

POLITICS & LOCAL GOVERNMENT

I. THE CONSTITUTION

The constitutional movement in Japan, unlike similar agitations in many other countries, was not inaugurated with the motive of restricting the power of the Sovereign, or settling the problem of "taxation and representation." It was a logical sequel to the reform of the Restoration of 1868,—a reform largely based on the idea of Europeanising the country, though the reformers themselves may not have started this stupendous work of national rebuilding with that definite aim from the first.

It was in 1874, the year following the split in the Council of State over the Korean question, that the regular constitutional movement first made its appearance in Japan. Among the politicians who undertook the constructive work of the Restoration, there were men of two distinct types, one civilian, and the other military. In thought the one belonged to the old "Kai-koku-to" (Opening the Country) party, and the other to "Joi-to" (Anti-Foreign) party. When they saw that even the national existence was in jeopardy at the critical moment of Restoration, their high sense of duty and patriotism bid them work in concert in the interest of national unification and for effecting the necessary reconstruction. But the great task over, collision between the two was inevitable sooner or later. The Korean question furnished such an occasion and the Council of State became sharply divided over it, the affair ending in the resignation of those who were defeated. Soon after they had left office, some of them began to take up an agitation aimed at the establishment of a national assembly, and publicly charged those who remained in office with determining the policies of State on their own arbitrary judgment. The agitation was entirely novel to the general public who had been inured to absolutism for centuries, and produced a wonderful effect on their mentality. So wide spread became this movement that the Government was forced to establish quasi-legislative institutions such as the "Genro-in" (Senate), a High Court of Justice named "Taishin-in," and an Assembly of Prefectural Governors to ask their opinion about establishing a national assembly.

The idea of Europeanising the country having engrossed the whole attention of the people, the agitation gained influence with great rapidity. It was even advocated by a member of the Council of State, Mr. (afterwards Marquis) Okuma, who without consulting his colleagues planned to establish a national assembly in 1883. His scheme called forth strong opposition from all his colleagues. Meanwhile the Government had decided to sell its industrial undertaking in Hokkaido to a private firm. It was a serious blunder and evoked bitter and vehement public criticism when it was exposed. On the 12th of October 1881, the

Government annulled the sale and at the same time issued an Imperial Decree commanding the establishment of a national assembly in 1890. In March 1882, Mr. (later Prince) Ito and his suite were dispatched to Europe to study the political institutions in the West with a view to prepare a Constitution for Japan. The mission returned home in 1884. While Ito was in Europe, he spent most of his time in Prussia, where he frequently came in contact with Prince Bismarck and seemed to have learned much from the talks he had with this great statesman of the 19th century. In fact, Ito, after his return from Europe, exerted all his influence and made every effort to introduce a bureaucracy after the Prussian type into Japan and, under his guidance, a Bureau for the investigation of Constitutional System was established in 1884 as an office subjoined to the Imperial Household Department, to carry out the work of drafting a Constitution. The principal persons whom Ito called together to assist in this grave task were Takeshi Inouye, (afterwards Viscount and Minister of Education), Miyoji Ito (now Count and Privy Councillor), Kentaro Kaneko (now Viscount and Privy Councillor) and some others. A constitution was duly framed, was submitted to and adopted by the Privy Council, and on the 11th of February 1889 it was promulgated. In the following year, the National Assembly or Imperial Diet, as it is called, was established, and thus Japan changed from an absolute monarchical state to a constitutional monarchy.

THE CONSTITUTION OF JAPAN

Chapter I.—The Emperor

Art. I.—The Empire of Japan shall be reigned over and governed by a line of Emperors unbroken for ages eternal.

Art. II.—The Imperial Throne shall be succeeded to by Imperial male descendants, according to the provisions of the Imperial House Law.

Art. III.—The Emperor is sacred and inviolable.

Art. IV.—The Emperor is the head of the Empire, combining in Himself the rights of sovereignty, and exercises them according to the provisions of the present Constitution.

Art. V.—The Emperor exercises the legislative power with the consent of the Imperial Diet.

Art. VI.—The Emperor gives sanction to laws, and orders them to be promulgated and exercised.

Art. VII.—The Emperor convokes the Imperial Diet, opens, closes, and prorogues it, and dissolves the House of Representatives.

Art. VIII.—The Emperor, in consequence of an urgent necessity to maintain public safety or to avert public calamities, issues, when the Imperial Diet is not sitting, Imperial Ordinances in place of law.

Such Imperial Ordinances are to be laid before Imperial Diet at its next session, and when the Diet does not approve the said Ordinances, the Government shall declare them to be invalid for the future.

Art. IX.—The Emperor issues or causes to be issued, the Ordinances necessary for the carrying out of the laws, or for the maintenance of the public peace and order, and for the promotion of the welfare of the subjects. But no Ordinance shall in any way alter any of the existing laws.

Art. X.—The Emperor determines the organization of the different branches of the administration, and the salaries of all civil and military officers, and appoints and dismisses the same. Exceptions especially provided for in the present Constitution or in other laws, shall be in accordance with the respective provisions (bearing thereon).

Art. XI.—The Emperor has the supreme command of the Army and Navy.

Art. XII.—The Emperor determines the organization and peace standing of the Army and Navy.

Art. XIII.—The Emperor declares war, makes peace, and concludes treaties.

Art. XIV.—The Emperor proclaims the law of siege.

The conditions and effects of the law of siege shall be determined by law.

Art. XV.—The Emperor confers titles of nobility, rank, orders and other marks of honour.

Art. XVI.—The Emperor orders amnesty, pardon, commutation of punishments, and rehabilitation.

Art. XVII.—A Regency shall be instituted in conformity with the provisions of the Imperial House Law.

The Regent shall exercise the powers appertaining to the Emperor in his name.

Chapter II.—Rights and Duties of Subjects

Art. XVIII.—The conditions necessary for being a Japanese subject shall be determined by law.

Art. XIX.—Japanese subjects may, according to qualifications determined in laws or ordinances, be appointed to civil or military offices equally, and may fill any other public offices.

Art. XX.—Japanese subjects are amenable to service in the Army and Navy, according to the provisions of law.

Art. XXI.—Japanese subjects are amenable to the duty of paying taxes, according to the provisions of law.

Art. XXII.—Japanese subjects shall have the liberty of abode and of changing the same within the limits of law.

Art. XXIII.—No Japanese subjects shall be arrested, detained, tried, or punished, unless according to law.

Art. XXIV.—No Japanese subject shall be deprived of his right of being tried by the judges determined by law.

Art. XXV.—Except in the cases provided for in the law, the house of no Japanese subject shall be entered or searched without his consent.

Art. XXVI.—Except in the cases mentioned in the law, the secrecy of the letters of every Japanese subject shall remain inviolate.

Art. XXVII.—The right of property of every Japanese subject shall remain inviolate.

Measures necessary to be taken for the public benefit shall be provided for by law.

Art. XXVIII.—Japanese subjects shall, within limits not prejudicial to peace and order, and not antagonistic to their duties as subjects, enjoy freedom of religious belief.

Art. XXIX.—Japanese subjects shall, within the limits of law, enjoy the liberty of speech, writing, publication, public meeting, and association.

Art. XXX.—Japanese subjects may present petition, by observing the proper form of respect, and complying with the rules specially provided for the same.

Art. XXXI.—The provisions contained in the present chapter shall not affect the exercise of the powers appertaining to the Emperor, in times of war or in cases of a national emergency.

Art. XXXII.—Each and every one of the provisions contained in the preceding Articles of the present chapter, that are not in conflict with the laws or the rules and discipline of the Army and Navy, shall apply to the officers and men of the Army and of the Navy.

Chapter III.—The Imperial Diet

Art. XXXIII.—The Imperial Diet shall consist of two Houses, a House of Peers and a House of Representatives.

Art. XXXIV.—The House of Peers shall, in accordance with the Ordinance concerning the House of Peers, be composed of the members of the Imperial Family, of the orders of nobility, and of those persons who have been nominated thereto by the Emperor.

Art. XXXV.—The House of Representatives shall be composed of Members elected by the people, according to the provisions of the Law of Election.

Art. XXXVI.—No one can at one and same time be a Member of both Houses.

Art. XXXVII.—Every law requires the consent of the Imperial Diet.

Art. XXXVIII.—Both Houses shall vote upon projects of law submitted to them by the Government, and may respectively initiate projects of law.

Art. XXXIX.—A Bill, which has been rejected by either the one or the other of the two Houses, shall not be again brought in during the same session.

Art. XL.—Both Houses can make representation to the Government, as to laws or upon any other subjects. When, however, such representations are not accepted, they cannot be made a second time during the same session.

Art. XLI.—The Imperial Diet shall be convoked every year.

Art. XLII.—A session of the Imperial Diet shall last during three months. In case of necessity, the duration of a session may be prolonged by Imperial Order.

Art. XLIII.—When urgent necessity arises, an extraordinary session may be convoked, in addition to the ordinary one.

The duration of an extraordinary session shall be determined by Imperial Order.

Art. XLIV.—The opening, closing, prolongation of session and prorogation of the Imperial Diet, shall be effected simultaneously for both Houses.

In case the House of Representatives has been ordered to dissolve, the House of Peers shall at the same time be prorogued.

Art. XLV.—When the House of Representatives has been ordered to dissolve, Members shall be caused by Imperial Order to be newly elected, and the new House shall be convoked within five months from the day of dissolution.

Art. XLVI.—No debate can be opened and no vote can be taken in either House of the Imperial Diet, unless not less than one-third of the whole number of the Members thereof is present.

Art. XLVII.—Votes shall be taken in both Houses by absolute majority. In the case of a tie vote, the President shall have the casting vote.

Art. XLVIII.—The deliberations of both Houses shall be held in public. The deliberations may, however, upon demand of the Government or by resolution of the House, be held in secret sitting.

Art. XLIX.—Both Houses of the Imperial Diet may respectively present addresses to the Emperor.

Art. L.—Both Houses may receive petitions presented by subjects.

Art. LI.—Both Houses may enact, besides what is provided for in the present Constitution and in the Law of the Houses, rules necessary for the management of their internal affairs.

Art. LII.—No Member of either House shall be held responsible outside the respective Houses, for any opinion uttered or any vote given in the House. When, however, a Member himself has given publicity to his opinion by public speech, by documents in print or in writing, or by any other similar means, he shall, in the matter, be amenable to the general law.

Art. LIII.—The Members of both Houses may, during the session, be free from arrest, unless with the consent of the House, except in cases of flagrant delicts, or of offences connected with a state of internal commotion or with a foreign trouble.

Art. LIV.—Ministers of State and the Delegates of the Government may, at any time, take a seat, and speak in either House.

Chapter IV.—The Ministers of State and the Privy Council

Art. LV.—The respective Ministers of State shall give their advice to the Emperor, and be responsible for it.

All Laws, Imperial Ordinances, and Imperial Rescripts of whatever kind, that relate to the affairs of the State, require the countersignature of a Minister of State.

Art. LVI.—The Privy Council shall, in accordance with the provisions for the organization of the Privy Council, deliberate upon important matters of State, when they have been consulted by the Emperor.

Chapter V.—The Judicature

Art. LVII.—The Judicature shall be exercised by the Courts of Law according to law, in the name of the Emperor.

The organization of the Courts of Law shall be determined by law.

Art. LVIII.—The judges shall be appointed from among those who possess proper qualifications according to law.

No judge shall be deprived of his position, unless by way of criminal sentence or disciplinary punishment.

Rules for disciplinary punishment shall be determined by law.

Art. LIX.—Trials and judgments of a Court shall be conducted publicly. When, however, there exists any fear that such publicity may be prejudicial to peace and order, or to the maintenance of public morality, the public trial may be suspended by provision of law or by the decision of the Court of Law.

Art. LX.—All matters that fall within the competency of a special Court shall be especially provided for by law.

Art. LXI.—No suit at law, which relates to rights alleged to have been infringed by the illegal measures of the executive authorities, and which shall come within the competency of the Court of Administrative Litigation especially established by law, shall be taken cognizance of by a Court of Law.

Chapter VI.—Finance

Art. LXII.—The imposition of a new tax or the modification of the rates (of an existing one) shall be determined by law.

However, all such administrative fees or other revenue having the nature of compensation shall not fall within the category of the above clause.

The raising of national loans and the contracting of other liabilities to the charge of the National Treasury, except those that are provided in the Budget, shall require the consent of the Imperial Diet.

Art. LXIII.—The taxes levied at present shall, in so far as they are not remodelled by new law, be collected according to the old system.

Art. LXIV.—The expenditure and revenue of the State require the consent of the Imperial Diet by means of an annual Budget.

Any and all expenditures overpassing the appropriations set forth in the Titles and Paragraphs of the Budget, or that are not provided for in the Budget, shall subsequently require the approbation of the Imperial Diet.

Art. LXV.—The Budget shall be first laid before the House of Representatives.

Art. LXVI.—The expenditures of the Imperial House shall be defrayed every year out of the National Treasury, according to the present fixed amount for the same, and shall not require the consent thereto of the Imperial Diet, except in case an increase thereof is found necessary.

Art. LXVII.—Those already fixed expenditures based by the Constitution upon the powers appertaining to the Emperor, and such expenditures as may have arisen by the effect of Law, or that appertain to the legal obligations of the Government, shall be neither rejected nor reduced by the Imperial Diet, without the concurrence of the Government.

Art. LXVIII.—In order to meet special requirements, the Government may ask the consent of the Imperial Diet to a certain amount as a Continuing Expenditure Fund, for a previously fixed number of years.

Art. LXIX.—In order to supply deficiencies, which are unavoidable, in the Budget and to meet requirements unprovided for in the same, a Reserve Fund shall be provided in the Budget.

Art. LXX.—When the Imperial Diet cannot be convoked, owing to the external or internal condition of the country, in case of urgent need for the maintenance of public safety, the Government may take the necessary financial measures, by means of an Imperial Ordinance.

In the case mentioned in the preceding clause, the matter shall be submitted to the Imperial Diet at its next session, and its approbation shall be obtained thereto.

Art. LXXI.—When the Imperial Diet has not voted on the Budget, or when the Budget has not been brought into actual existence, the Government shall carry out the Budget of the preceding year.

Art. LXXII.—The final account of the expenditures and revenue of the State shall be verified and confirmed by the Board of Audit, and it shall be submitted by the Government to the Imperial Diet, together with the report of verification of the said Board.

The organization and competency of the Board of Audit shall be determined by law separately.

Chapter VII.—Supplementary Rules

Art. LXXIII.—When it has become necessary in future to amend the provisions of the present Constitution, a project to that effect shall be submitted to the Imperial Diet by Imperial Order.

In the above case, neither House can open the debate, unless at least two-thirds of the whole number of Members are present, and no amendment can be passed, unless a majority of at least two-thirds of the Members present is obtained.

Art. LXXIV.—No modification of the Imperial House Law shall be required to be submitted to the deliberation of the Imperial Diet.

No provision of the present Constitution can be modified by the Imperial House Law.

Art. LXXV.—No modification can be introduced into the Constitution, or into the Imperial House Law, during the time of a Regency.

Art. LXXVI.—Existing legal enactments, such as laws, regulations, or by whatever title they may be called, shall, so far as they do not conflict with the present Constitution, continue in force.

All existing contracts or orders, that entail obligations upon the Government and that are connected with Expenditure, shall come within the scope of Art. LXVII.

II. POLITICS

Politics in every country has its own peculiarities, and that is particularly so in Japan. Her political institutions are very complicated, and the political psychology of her people is unique and extremely singular. Hence it is not a very easy matter to describe the working of her government or the political state of the country.

The principal institutions in the constitutional system of Japan are the Emperor, the Privy Council, the Cabinet, the Imperial Diet, the Electorate, the political parties, and the Genro or Elder Statesmen. Their legal status and actual powers, and their relations to each other may be briefly described as follows:

The Emperor

The legal status of the Emperor under the Constitution, if properly interpreted, does not much differ from that of any constitutional monarch, but his influence over the masses of the people in Japan is extraordinary and without parallel. Prince Ito, the chief framer of the Constitution, expounds the Constitutional status of the Emperor with a certain coloring of popular sentiments: "The sovereign power of reigning over and governing the State is inherited by the Emperor from his ancestors, and by him bequeathed to his posterity. All the different legislative as well as executive powers of State, by means of which he reigns over the country and governs the people, are united in the Most Exalted Personage, who holds in his hands, as it were, all the ramifying threads of the political life of the country, just as the brain in the human body is the primitive source of all mental activity manifested through the four limbs and different parts of the body." Thus in theory the Emperor is absolute, and the masses of the people in Japan believe him to be sacred and inviolable according to the letter of the Constitution. But in reality, he acts only by the advice of the Prime-Minister and occasionally by that of the Elder Statesmen. And constitutionally he is inviolable in the sense that "he can do no wrong." In fact, the power he actually exercises in practical politics is by no means greater than that of the King of England, though his influence owing to the peculiar psychology of the people, is no doubt far greater than that of the British Crown, and plays the predominant part in Japanese politics.

In England, even the masses possess knowledge enough to be aware that for whatever the King does or says the Premier

is responsible, whereas, in Japan the words of the Minister-President, if put into the mouth of the Emperor, become the words of the Emperor himself, thus investing them with a greater weight and dignity. They become the supreme authority of the land. Therefore, it not seldom happens that the Minister-President of Japan, when affairs are at a deadlock, tries by means of the name of the Emperor to evade his responsibility, or to overcome a strong opposition of the people to the Government, with the object of maintaining his office. And that is at least one reason why there still exists in Japan a constitutional government irresponsible to the popular assembly.

The Privy Council

Next to the Emperor, the Privy Council in Japan occupies a peculiar position in the constitutional system of her government. It is not like the Privy Council of England, out of which the British Cabinet system has grown, and in which the Cabinet ministers have their legal existence. The Cabinet and the Privy Council in Japan form two separate and independent institutions.

The functions of the Privy Council are chiefly of a consultative nature. It meets to deliberate on any important matter of State, when its opinion is asked for by the Emperor, and advises him according to its lights. The principal matters on which it is usually consulted are those which come under the jurisdiction of the Imperial House Law, all important legislation relating to Articles of the Constitution, the issuing of proclamations of the law of siege and of Imperial ordinances and all the matters relating to international treaties and pledges.

The power of the Privy Council is entirely of a negative nature; nevertheless it exercises a very strong power and influence in Japanese politics. It consists of 26 members with its own President and Vice-President. They are all veteran statesmen who have played very important parts in the administration, and though no longer taking an active share in it, their age and position and official experience entitle them to universal respect. For the same reason they are extremely conservative in their political ideas and sentiments.

All such important acts of legislation relating to the rights and liberties of the people as an Electoral Reform Bill, a Bill Formulating the Adoption of Jury System, an Educational Reform Bill, etc., are usually submitted to the Privy Council, before the Government introduce them to the Imperial Diet. The Privy Council is at liberty to reject them or to delay their passage. Of course, it is as the Emperor pleases either to accept or reject this decision, but it may easily be seen how great is the influence which the Privy Council can exercise on all such legislation by virtue of its deliberative function. Sometimes the Cabinet uses the powers of the Privy Council as a convenient expedient for killing measures it does not really desire to bring in to the Diet. On the other hand, it sometimes happens that the Privy Council prevents the passage of some important measures of the Government. But the Privy Council cannot meet on its own account, its meetings being called by the Emperor on the advice of the Minister-President. All the Cabinet ministers have seats in the council *ex-officio*, and, therefore,

it is the will of the Cabinet that ultimately prevails, and not that of the Privy Council.

As to international treaties and pledges, the Privy Council is always consulted, and it is the only deliberative body in the constitutional system of Japan that can freely discuss all the foreign policies of a Government with the Cabinet, though its meetings are kept absolutely secret.

The most important power of the Privy Council is that of interpreting the Constitution. In 1927 and '28 three important cases were submitted to the approval of the Privy Council. The Wakatsuki Government's Bank of Taiwan rescue measure in April '27 was rejected on constitutional ground, a similar proposal made by the succeeding Cabinet was passed, and the Peace Preservation emergency ordinance proposed in July '28 by the same Cabinet was also passed.

The Cabinet

Nowhere in the Constitution of Japan is the word "Cabinet" mentioned. Yet there exists as a matter of fact a collective body of all Departmental Ministers under the presidency of a Minister-President, somewhat like the Council of Ministers in Belgium, or the British Cabinet, for the purpose of initiating, determining, or carrying out the general schemes, and policies of the government. Though this collective body known as the "Naikaku," meets to discuss and determine under the guidance of the Minister-President how the Imperial government is to be carried on in all important matters of State and how to advise the Emperor, yet it has no joint responsibility as the British Cabinet has, that is to say, each Cabinet Minister is not responsible for the action of the Cabinet as a whole nor the Cabinet as a whole for the action of each Minister.

As in England the Cabinet in Japan is in reality the chief executive organ of the State, and exercises all powers executive, legislative, and judicial, which are invested in the Crown by the Constitution, that is to say, the issuing of administrative and emergency ordinances, the making of treaties with foreign nations, the declaring of peace and war, the commanding of the army and navy, and the determining of their organisation, the appointing, and dismissing of public officials (including all judges and procurators who hold office on a life tenure), and the fixing of their salaries and pensions, etc., all of which falling within the executive function of government are virtually controlled by the Cabinet in the name of the Emperor.

In England, the Cabinet Minister usually belong to one or another political party in the House of Commons; and the Cabinet is more or less like a committee appointed by a majority of the House of Commons, and entrusted with the exercise of the executive power of State, and therefore, responsible to Parliament. In Japan, however, the Cabinet Ministers are not always party-men; they may hold their office independent of the House of Representatives. The representative system of government has not yet developed in this country to such a stage as to make the Cabinet Ministers necessarily responsible to the Diet.

A certain ordinance provides that the Minister of War must be but a General or Lieutenant-General, and the Minister for the

Navy, an Admiral or Vice-Admiral, and because of this ordinance occasionally a queer phenomenon crops up in Japanese politics. A few years ago, Viscount Kiyoura was sent for to organise a Cabinet, but he failed in his attempt, for he could not find any suitable Admiral or Vice-Admiral willing to become the Minister for the Navy in his Cabinet. Once the Salonji Ministry was forced to go out of office because Marquis Salonji refused to take up the plan of adding two divisions to the Army. Thus in Japan Generals or Admirals at times even sway the power of making or unmaking a Cabinet.

But the above instances are unusual, and as a matter of fact, the power and influence of military men have markedly declined since the memorable Disarmament Conference. On the other hand, the power of the Diet, particularly that of the House of Representatives, is steadily growing so that it is now a matter of absolute necessity for the Cabinet to control a majority in the Diet, for without its approval no important matters of State can be carried out.

The Imperial Diet

The Imperial Diet is bicameral, consisting of a House of Peers and a House of Representatives. The former is composed of Princes of the Blood, ordinary Princes and Marquises who sit by virtue of their right, Representatives of Counts, Viscounts, and Barons; Imperial Nominees and Representatives of the highest tax-payers.

With regard to legislative matters, all rights and powers granted to the Diet by the Constitution are equally granted to both Houses, except that the Budget is to be brought in first in the House of Representatives. Thus the two Houses are supposed to be coordinate, neither the one nor the other being considered superior or subordinate. But it is not so in practical politics. Where there are two chambers in a legislature, naturally the one or the other becomes predominant.

Although, as far as outward appearances go, the members of the House of Peers occupy a better fortified position, for the House of Peers is not subject to dissolution as the House of Representatives is, yet in practice it is not the former, but the latter that the Cabinet regards with greater dread, holding it more aggressive and powerful, and more difficult to control. The fact is the 125 Imperial Nominees in the House of Peers are mostly ex-officials of government, who hold their position on a life tenure, while the rest are aristocrats either by birth or by wealth. Hence their natural sympathy is always with the Cabinet Ministers independent of and irresponsible to the House of Representatives.

In the House of Peers there are no political parties, so to speak. Nevertheless all its members are now politically divided into six groups: The Kenkyu-kai, the Chawa-kai, the Dosai-kai, the Kosei-kai, the Koyu-kurabu, and the Mushozoku or Independents. Of course these groups are not formed on any definite political views or ideas. However, it can not be denied that there has already appeared a strong tendency among the peers towards forming political parties, especially among the younger, active and ambitious members of the House.

In the House of Representatives, there are very clear-cut divisions; and no matter how many parties there are, the House is always divided into two camps: the government party and the opposition, though this party division does not come from any political principle or principles.

The lower House has the power of initiative in all matters of legislation, but its legislative power is rather negative in character, for it is not in Japan as in England where a majority of the House of Representatives ultimately controls the Cabinet. It is the Cabinet that gets its majority by one way or other. When a political party in Japan supports the government, it is because its leader is the Prime-Minister or holds a certain portfolio in the Cabinet. Then again some parties or individual members give support to the government, thinking that they may be able to secure important office or serve some special interests by having direct connection with the men in power. Moreover, the government can sometimes force them to support its policies either by intimidation or through threat of dissolution.

The Cabinet Ministers in Japan do not therefore formulate the policies of State in accordance with the political programmes which the parties supporting the government may have laid down at the time of their election. As a matter of fact, the political parties in Japan have no definite programmes; they make no definite promises before election. They know well that they cannot make their promises good, even if they made them. The Cabinet Ministers have practically an entirely free hand to formulate all policies of State, and even the government party usually accepts almost blindly whatever the Cabinet decides. Too often the government party is merely a convenient tool to the Cabinet for carrying its measures through the House of Representatives.

The Electoral System

The Election Law in Japan has a separate existence from the Constitution; and that is very fortunate for her, revision having been effected already three times solely on account of this convenient arrangement. The Constitution, on the other hand, is a formidable document that does not easily allow modification.

Important features in the original and revised Election Laws are shown below in a tabulated form.

		Elector		Candidate		No. Members
		Age	Tax	Age	Tax	
Original,	1890	25	¥15	30	¥10	300
Revised,	1900	"	¥10	"	none	381
"	1920	"	¥ 3	"	"	464
"	1925	"	none	"	"	466

		Voters (1000)	Electoral district
Original,	1890	500	1-2 mem. per district
Revised,	1900	1,500	4-12
"	1920	2,860	1-3
"	1925	13,000	3-5

The last revision is memorable as an epoch-making event in the democratic movement of Japan and as a distinct triumph realized by those espousing the cause of universal suffrage. It is essentially a general manhood suffrage system somewhat limited in application, but as such it occasioned intense contest from the 42nd session (1919-20) to the 50th (24-25) in and out of Parliament between the two opposing parties and it even caused at one time the dissolution of the House. The law as it stands is a result of compromise at the conference of the two Houses.

REVISED ELECTION LAW

The features of the revised election law are outlined as follows:

As shown above the result of the removal of the tax qualification has increased the number of those eligible to franchise to upward of 13,000,000 as against approximately 3,000,000 under the former system. Excluding from that figure those who are disqualified for franchise because of their receiving public or private relief or help towards a living on account of poverty, the number of those entitled to vote will come down to about 9,600,000

Eligibility for the Franchise:—The right of voting has been extended to the following:

Students of the Government, public and private schools; Teachers of primary schools; Shinto or Buddhist priests and other persons engaged in religious work; Persons doing work for the Government under contract; Government and public officials connected with election affairs, who have not resigned their offices 3 months before. (Government officials other than those connected with administrative affairs of State have no right to vote.)

Electoral Districts:—The new law has adopted the system of middle electoral districts, the number of members for each district being fixed at 3 to 5, at the rate of one member for a population of 120,000. The former system of independent electoral districts for cities has been abolished. In consequence of the above-mentioned change the number of electorates has decreased to 122 from 379 as under the former system, while the number of members has increased to 466 from 464.

Period of Election Campaign:—Under the former election law the period intervening between the expiration of the term of members and the day of the next general election, or between the dissolution of the House of Representatives and the next general election has been unusually long. The new law has considerably shortened the period. In the case of a dissolution the general election is to be held within 30 days from the date of the dissolution, according to the new law, while in the case of the expiration of the members' term a general election is to be held on the day following the day when the term expired, or within 5 days after the said date in case circumstances necessitate. In case the members' term expires during the session of the House or within 25 days after the closing of the session a general election is to be held within 30 days after the lapse of 26 days from the date of the closing of the session.

Candidates:—The candidates must send in application to the chief election commissioners within 7 days before the date of the election, and must deposit a sum of ¥2,000 either in cash or public bonds as security. In case the number of candidates falls short of the fixed number of members to be returned from a certain electoral district the candidates will be elected members for that district without going through the proceedings of voting.

Cost of Election:—The new election law places certain restrictions on the expenses involved in the election campaign. The expense to be defrayed by a candidate is fixed at the rate of 40 sen for each franchise-holder, and the total amount of the expenses is fixed at the total number of the franchise-holders of the electoral districts divided by the number of the parliamentary members for the districts, the remainder being multiplied by 40 sen. The standard figure of the total number of voters divided by the number of members is estimated as between 25,000 and 30,000, and the amount of the election expenses is roughly estimated as between ¥12,000 and ¥15,000. The defrayal of the election expenses is to be in charge of chief election commissioners or those specifically designated by chief election commissioners. In case the amount of the expenses expended by a candidate exceeds the maximum limit the election of such candidate shall be declared void.

Strict Control over Campaign:—The revised law does not recognize the former system of persons engaged in election campaigns, who, receiving fee or wages from candidates, occupy themselves in canvassing among voters with the object of securing or soliciting votes. In the new law only election commissioners and election committees, their number not to exceed fifty persons, are permitted to take part in the campaign. These are allowed to receive remuneration from candidates to cover the cost incurred or they may be employed under the wage system by the candidates. The number of election offices to be established by a candidate in one electoral district is limited to seven. The new law prohibits the practice of the "house-to-house call" by candidates or their canvassers for soliciting votes.

Penal Provisions:—The revised election law provides much heavier penalties for the violation of the law. Candidates who have infringed the law are punished with a fine of ¥2,000 or less or imprisonment with hard labor as the highest penalty, as against the maximum amount of fine of ¥500 and imprisonment without hard labor of the old law.

UPPER HOUSE REFORM

Simultaneously with the adoption of the general manhood suffrage bill in the 50th session (1924-5) of the Diet the reform of the Upper House was effected, though naturally more limited than that of the other House. The main points in the reform are as follows:

The age-limit for the members of the order of Prince and Marquis was raised to 30 years from 25 years.

The number of the members of the lower order has been fixed at 18 for Counts, 66 for Viscounts and 66 for Barons.

The inclusion of 4 representatives of the members of the Imperial Academy to be elected from among the members thereof by mutual election.

The highest tax paying members in the House shall be elected from among those paying direct national tax to the amount of ¥300 and upward in connection with landed property, industry or commerce, the age-limit for such members being fixed as 40 years and upwards. The number of such members for each prefecture is limited to 1 or 2, according to the size of population, the total number not exceeding 66.

The application of the penal clauses of the election law, hitherto exclusively applied to the election of the members of the Lower House, to the election of the highest tax paying members.

The cancellation of the 7th Article of the Law of the Houses providing that the number of the Imperial nominees and highest tax paying members in the Upper House shall not exceed the number of the titled members.

The period of the examination of the Budget by the Upper House committee is limited to within 21 days as in the case of the Lower House committee.

THE "GENRO"

The "Genro" or so-called elder statesmen as a body has no constitutional status, but as surviving builders of the grand work of the Imperial rehabilitation half a century ago the Council of Genro was, until the beginning of 1922, an important institution in the political system of Japan, though with functions not legally formulated. It then consisted of four elder statesmen, Marshal Prince Yamagata, Prince Salonji, Marquis Matsukata and Marquis Okuma. The last mentioned had not often been present at its conclaves. With the death of the old Marshal, the doyen of the clique, of Marquis Okuma early in 1922, and of Marquis (afterward Prince) Matsukata in July 1924, the influence of the Genro naturally showed a marked decline. In one respect, however, the surviving patriarch is still made to play a highly important part in directing the course of affairs of state. In Japan an outgoing Premier resigns without recommending his successor, as the Ministry is not yet strictly responsible to the Diet, so that when Viscount Kato as Premier of the Coalition Ministry submitted his resignation, the Prince-Regent sent an Imperial messenger to Prince Salonji to ask him to recommend eligible successors. It was through his choice that the Viscount, it is understood, was ordered to reorganize his cabinet. The idea seems to be entertained seriously in some circles that the Genro system should be kept up and that a new council composed of less old retired statesmen but of established prestige should be created to take the place of the venerable survivor. The notion, however, has met with a cool reception, if not a scoffing criticism from the public and has apparently been given up.

THE POLITICAL PARTIES

The representative system of Japan dates from 1890, but the history of political parties is much earlier. The Jiyu-to (Liberals) was the first political party and was organized by the late Count Itagaki and his followers in 1880, to be followed two years later by the Kaishin-to (Progressives) formed by the late Marquis, then Count Okuma. Both upheld the cause of liberty and progress, the only difference being that the former were more radical. As an organ of conservative and bureaucratic element the Taisei-to (Imperialists) was created soon after, but for all the fostering care bestowed upon its growth, it failed to enlist any great support of the public and disappeared in 1884.

Hard and bitter was the campaign which the Liberals waged against bureaucracy and militarism. Not unfrequently they even resorted to violent measures against their political opponents who, entrenched in their formidable stronghold, treated them with merciless severity. It was a critical moment in the history of Japan. Fortunately Japan had at that time an enlightened sovereign in Meiji Tenno who on the advice of the late Prince Ito, his most trusted counsellor, made a solemn pledge in 1881 to establish constitutional government within ten years. The heated and dangerous political agitation was thus diverted to the constructive work of preparation and training for the eagerly anticipated day. The history of our political parties from the convoking of the first Diet in 1890 to the formation of the 4th Ito Cabinet in 1900 may be summed up in a few words. In the first few years the Bureaucratic Government and political parties were almost irreconcilable; in the second stage, either exhausted or tired of incessant strife, the two became more placable, effected some sort of understanding, and a partial coalition Cabinet was formed first by Ito with Itagaki's followers and next by Matsukata with Okuma's Kaishin-to (Progressives). The two trials failed miserably owing to the lurking suspicion which the bureaucratic and party adherents had retained towards each other. The two bureaucratic administrations that followed had only served to bring into alliance the followers of the two leaders to fight the bureaucratic government. The Opposition tactics worked with complete success in the House of Representatives though at the cost of inviting dissolution on each occasion. Then occurred an interesting episode in the constitutional history of Japan. The bureaucrats at the instance of Ito decided to recommend Okuma and Itagaki to the Throne to form their joint cabinet, and thus for the first time partymen were placed in the responsible position of conducting national administration. Before forming the Cabinet the two parties dissolved themselves and were brought together under a new standard named "Constitutional Party". The chairs of the ministries of Army and Navy were filled, as is the case even today, with prominent personages in the respective services, but otherwise the change was distinctly democratic. However this Cabinet could not last more than six months; it crumbled through the jealousy of the Liberal and Progressive elements for share of official power, the non-party holders of the two Service chairs fanning the friction.

Thus put to test and proved wanting the Bureaucrats could

recover with easy conscience their supreme position in the administration of the country, and from 1898 to 1914 the partymen had to view with impotent rage eight bureaucratic ministries succeeding one after another so that the six months' miserable experience as administrators cost them sixteen long years of humiliation and subservience as supporters of one or other Genro premiers.

When on the demise of the great Meiji Tenno, who had naturally preferred the veteran statesmen as Ito and Yamagata to party leaders, the 3rd Katsura Ministry was formed with no particular following in the House, the partymen could no longer tolerate a bureaucratic régime. Their pent-up discontent burst up in the "Save the Constitution" agitation, and the Government was overthrown. Thus after long waiting Okuma formed his 2nd Cabinet with his own followers. It had a powerful backing in the House, but after two years and a half it fell over the Election scandal affair. It was succeeded by a reactionary administration headed by Marshal Terauchi who was supported by the Seiyu-kai under Hara, the second largest party in the House. When the soldier-statesman had to resign owing to his growing unpopularity on account of the "Disgrace loans" and especially the "Rice riot" in August 1918, he with approval of the Genro recommended Hara as his successor. The Hara Cabinet was the first government under a commoner premier, and it looked as though the course of constitutional politics had regained a normal groove. He proved a consummate party leader, dissolved the House when the Opposition introduced the Manhood suffrage bill. The general election of May 1920 secured his party 282 seats out of the total 464. The untimely death of the veteran leader in Nov. 1921 by a boy-assassin's hand caused serious shaking to the stability of this predominant party, for Baron (now Mr.) Takahashi failed to command undivided devotion of the rank and file, and his cabinet lasted only six months owing to internal dissension. It was followed by the three transcendent cabinets of Adm. Kato, Adm. Count Yamamoto and Vis. Kiyoura. The formation of the last cabinet was a signal for the smouldering flame of discontent between the faithful followers of the new Seiyu-kai chief and their opponents to burst up. The issue was whether the party should effect understanding with the Kiyoura government or whether to fight it on constitutional ground, and eventually those who declared in favor of the Government seceded on the eve of the general extraordinary election and organized their own party called Seiyu-honto, while those who strenuously opposed this temporizing policy arranged some compromise with their former rivals the Kensei-kai the better to conduct the election contest against the common enemy the Ministerial Seiyu-honto. By irony of fate the Ministerialists were defeated in the election and the Kiyoura Cabinet withdrew and was succeeded by the Kensei-kai-Seiyu-kai Coalition Cabinet as the 1st Kato (Viscount) Ministry. It speaks volume for the greatness of Hara as party leader that the sudden disappearance of his controlling hand from the Parliamentary stage caused serious dislocation not only of the Seiyu-kai but of the rivals the Kensei-kai. The loss of this trained pilot drove the Seiyu-kai seceders to the mortifying state of stray party, for though in numerical strength in the House

they were next to the Kensei-kai but superior to the Seiyu-kai, they were obliged to maintain the attitude of neutrality to both, if not a bit more friendly to the former than to the latter. The presence of this large anomalous party was largely responsible for the kaleidoscopic change that has marked the party politics of Japan recently. The 1st Kato (Vis.) Cabinet having been created from the temporary combination of the Kensei-kai and the Seiyu-kai to fight the super-party Kiyoura Cabinet, it was a foregone conclusion that as soon as its *raison d'être*, the overthrow of the Kiyoura Cabinet, disappeared it should collapse. This occurred in 1925 on the ostensible ground of difference of views over the reform taxation measure but really from the deeper cause of inherent rivalry between the two parties. With the formation of the 2nd Kato Cabinet in August 1925 with his own followers the Kensei-kai at last returned to power after having patiently waited for a turn of fortune ten years. The death of Premier Kato after a short illness and the creation of another Kensei-kai Cabinet by Mr. Wakatsuki, his immediate lieutenant, did not particularly affect the status quo of the three leading parties, Kensei-kai, Seiyu-honto and Seiyu-kai. The second remained as political waifs, to side at one time with the Ministerialists and then to renew reconciliation parleys with the former comrades the Seiyu-kai which was now led by General Baron Tanaka as successor of Mr. Takahashi. This abnormal phenomenon was at last dispelled when the Wakatsuki Government resigned over the Bank of Taiwan's Relief Measure which the Privy Council disapproved on constitutional ground and when Baron Tanaka as leader of the Seiyu-kai was ordered to form a ministry. The occasion served for the Kensei-kai and the Seiyu-honto to effect formal combination and to organize a new party called "Rikken Minseitō" (Constitutional Democratic Party). In anticipation of the coming development some 22 M.P.s and other notables identified with the Seiyu-honto went over to their original camp, but the Minseitō still outnumbered the rival party, as it commanded 226 seats. The party composition of the House was thus clearly divided between the two main bodies, for the only minor groups worth mentioning were Mr. Muto's (President of Kanegafuchi Cotton Mill) eight or nine followers in the House styled Business-men's party, the temporarily organized Shinsei Club counting 26, and some 20 independents, Mr. Inukai's coterie having practically disappeared with his going over to the Seiyu-kai.

Proletarian Parties.—Amidst these ceaseless changes in the composition of the existing parties the rapid march of democratic movement and the enactment of the Manhood Suffrage Law in 1926 were signalized by the birth of several Proletarian parties as Shakai Minshu-tō (Social Democratic Party upholding Fabian ideas), Rodo Nomin-tō (Labor Farmers Party), Nihon Nomin-tō (Japan Farmers Party), and Nihon Rono-tō (Japan Labor Farmers Party). Their numerical strength in the national chamber counts as yet only eight but they are expected to rise to a great power in near future. Of the four Proletarians the first organized by such intellectuals as Mr. Abe, formerly Prof. at Waseda, and Mr. Suzuki, President of the Federation of Japanese Laborers overshadows the other sections in influence, and though their following, about 75,000, may be less than that of some

others, they are far more compact and well organized. The other Proletarians are fluctuating and may be broadly divided between those advocating extreme views tinged reddish and others standing midway between them and the Fabians. It should be noted that the Rodo Nomin was ordered dissolution by the Home Minister in 1928 on the charge of holding communistic ideas and hence subversive of the national polity. They were even suspected of being more or less supported by the Russian Third International. The idea to bring the Proletarians exclusive of the Left group into a working body of federation have been repeatedly discussed, but it still remains in theory.

Selyu-kai.—The creation of the Selyu-kai by the late Prince Ito in 1900 forms a distinct chapter in the history of Japan's party politics, it marking a notable departure in the attitude of both the bureaucratic statesmen and partymen towards each other and the adoption of a new conciliatory policy in place of the cat-and-dog life they had long led. The Liberals, Count Itagaki's pioneer organization, formed a nucleus of the enlightened statesman's party which was also joined by a section of Okuma's followers and others, so that it commanded an absolute majority in the lower House. The Selyu-kai's first Ministry under Ito did not last more than two years, for what with the opposition of Peers and militarists and next desertion of members of questionable loyalty, its power was weakened. Then in 1903 Ito had to exchange his post as leader for the Presidency of the Privy Council held by Prince Saionji, and the latter led the party till 1914. The chair was next filled by Mr. Hara, and during the seven years of his leadership the Selyu-kai reigned supreme, all too overwhelmingly. Naturally the masterful leader made himself an object of implacable hatred and unbounded dread to his political foe, this eventually costing him his life by a boy-assassin's dagger. From the untimely death of Hara on 4 Nov., '21 till the terrible split of the party in January '24 the history of the Selyu-kai was one of repeated troubles and internal disintegration. The resignation of the leadership by Mr. Takahashi in 1925 in favor of Gen. Baron Tanaka somewhat improved the situation as it induced a number of the seceders to come back. The Party's strength in the House still fell below the Kensei-kai, and was brought practically to a tie by the general election of 1928. The Party appears to be far from stable and settled internally, and loud voice of discontent is still heard over the Baron's high-handed recommendation of his personal friends to the Ministerial and other important posts.

Minsei-to.—This is a party created in 1927 on the union of the Kensei-kai and the Selyu-honto, the former being historically composed of the followers of Okuma, Katsura, and Inukai. Katsura's party was called the Doshi-kai, and when the Prince died without seeing the bright day for his party, the leadership of the party fell naturally upon Viscount Kato, a deputy leader. The party supported Marquis Okuma when he organized a Cabinet in 1914, and Viscount Kato was given the post of Minister of Foreign Affairs. In the general election that was held in 1915 under the Okuma Cabinet, the influence of the party almost swept the whole country. The name of the party was then changed to Kensei-kai. At the time of the downfall of the

Okuma Ministry, in 1916, the Kensei-kai still held a majority in the House of Representatives, but in the general elections of 1917 and 1920, the party's strength was much reduced, and it had only 109 seats in the House at the beginning of the 45th session, to be still further weakened during that session. In the general election of May 1924 the party profited from the desperate contest fought between the Seiyu-kai and its deserters the Seiyu-honto, and came out relatively the strongest force in the House. Mr. Hamaguchi succeeded Mr. Wakatsuki as leader of the party in May, and the latter and Mr. Tokonami, formerly leader of Seiyu-honto, were appointed Advisers.

TANAKA MINISTRY

The resignation of the Wakatsuki Cabinet on April 18, 1927 over the Bank of Taiwan's Emergency Imperial Ordinance which was disapproved on April 17 by the Privy Council was followed by the formation on the 20th of the Seiyu-kai Government under General Baron Gi-ichi Tanaka, leader of the Seiyu-kai, the second largest political party in the House, the composition at its formal installation being as follows:—

Premier	General Baron Gi-ichi Tanaka, Member of House of Peers
Minister of Foreign Affairs....	Do.
Minister of Home Affairs.....	Dr. Kisaburo Suzuki, Member of House of Peers
Minister of Finance.....	Korekiyo Takahashi, M.P.
Minister of War.....	General Yoshinori Shirakawa
Minister of Navy.....	Admiral Kelsuke Okada
Minister of Justice.....	Dr. Yoshimichi Hara
Minister of Education.....	Chuzo Mitsuchi, M.P.
Minister of Agr. & Forestry...	Teijiro Yamamoto, M.P.
Minister of Com. & Industry..	Tokugoro Nakahashi, M.P.
Minister of Communications...	Keisuke Mochizuki, M.P.
Minister of Railways.....	Heikichi Ogawa, M.P.

About one month after the creation Mr. Takahashi resigned and the vacated chair was filled by Mr. Mitsuchi, Education Minister, the latter post being given to Dr. Mizuno, formerly Home Minister in the Terauchi Ministry. In May 1928 Suzuki "resigned at his own request", but really to placate those Independents who threatened to support the Opposition's non-confidence motion introduced about the same time, the Independents themselves entertaining bitter grievance against the Home Minister for his alleged interference in the latest general election. The Premier, who had repeatedly declared to move by the "all in the-same-boat" policy, was obliged to leave the Home Minister to his fate in order to save the Cabinet. Mr. Mochizuki, Minister of Communications, was transferred as Dr. Suzuki's successor while Mr. Kuhara, a copper millionaire and personal friend of the Premier, was given the chair vacated by Mr. Mochizuki. Dr. Mizuno who was opposed to Mr. Kuhara's entry was obliged to resign and he was succeeded by Mr. Kazuo Shoda, Minister of Finance in the Terauchi Ministry and associated in the

popular memory with what is known as the "disgraceful loan". The Kuhara affair also caused the secession of Mr. S. Koizumi, chief whip, from the party, while the Education Minister's resignation invited the opposition of the Peers and a number of Imperial Tokyo University professors on account of the so-called "Emperor's graceful words" incident.

CABINET CHANGES SINCE 1885

It will be seen from the following table of cabinet changes since 1885 the bureaucratic statesmen monopolized the administration till the formation of the 1st Okuma Cabinet in June 1898. It was the first Cabinet organized along the party lines, but unfortunately it collapsed after a short existence from internal dissension of the two rival parties that had temporarily sunk their difference to uphold the common cause of party politics. Then followed the succession of Cabinets either purely bureaucratic or with a thin veneer of party element. Of the 16 administrations that were in power from the fall of the Okuma Cabinet down to the formation of the 2nd Kato Cabinet, seven were purely bureaucratic and the other nine mixed. So far the Hara Ministry and its extension, the Takahashi Ministry, have risen to the highest level accessible to party politics under the peculiarly complicated circumstances in which various political organizations work in Japan. The Hara Administration is noteworthy as the first Cabinet of Japan formed by an avowed party Seiyu-kai leader and an untitled commoner.

CABINET CHANGES SINCE 1885.

Ministerial Chief	1st Ito Dec. 1885	Kuroda Apr. 1889	1st Yamagata Dec. 1889	1st Matsukata May 1891	2nd Ito Aug. 1892
Premier	Ito	Kuroda	Yamagata	Matsukata	Ito Kuroda
Foreign	Inouye, Ito Okuma	Okuma	Aoki	Enomoto	Mutsu Sanoji
Home	Yamagata	Yamagata Matsukata Yamagata	Yamagata Saigo	Saigo Shioagawa Soyejima Matsukata Kono	Inouye Nomura Yoshikawa Itagaki
Finance	Matsukata	Matsukata	Matsukata	Matsukata	Watanabe Matsukata Watanabe
War	Oyama	Oyama	Oyama	Takahama	Oyama Saigo Yamagata Oyama
Navy	Saigo Oyama Saigo	Saigo	Saigo Kabayama	Kabayama	Nire Saigo
Justice	Yamada	Yamada	Yamada	Yamada Tanaka Kono	Yamagata Ito Yoshikawa
Education	Mori	Mori Oyama Enomoto	Yoshikawa	Yoshikawa Oki	Kono Yoshikawa Inouye Sanoji
Agriculture & Commerce	Tani Saigo Tani Hojika's Kuroda	Enomoto Inouye Yamagata	Mutsu	Mutsu Kono Sano	Goto Enomoto
Communications	Enomoto	Enomoto Goto	Goto	Goto	Kuroda

(Continued)

	2nd Matsukata Sept. 1898	3rd Ito Jan. 1898	1st Okuma June 1898	2nd Yamagata Nov. 1898	4th Ito Oct. 1900	1st Katsura June 1901
Premier.....	Matsukata	Ito	Okuma	Yamagata	Ito	Katsura
Foreign.....	Okuma Nishi	Nishi	Okuma	Aoki	Salonji Kat.	Komura
Home.....	Kabayama	Yoshikawa	Itagaki	Salgo	Suyematsu	Utsomi Kodama Yoshikawa Kiyoura Sone
Finance.....	Matsukata	Inouye	Matsumura	Matsumura	Watanabe Salonji	Sone
War.....	Takashima	Katsura	Katsura	Katsura	Katsura Kodama	Terauchi
Navy.....	Salgo	Salgo	Salgo	Yamamoto	Yamamoto	Yamamoto
Justice.....	Kiyoura	Sone	Ohigashi	Kiyoura	Kaneko	Kiyoura Hatano
Education.....	Hachisuka Hamao	Salonji Toyama	Ozaki Inukai	Kabayama	Matsumura	Kikuchi Kodama
Agr. & C.....	Nomoto Okuma Yamada	M. Ito Kaneko	Osaki	Sone	Hayashi	Hirata Kiyoura
Com'tions.....	Nomura	Suyematsu	Hayashi	Yoshikawa	Hoshi Hara	Yoshikawa Sone

(Continued)

	1st Salonji June 1905	2nd Katsura July 1905	2nd Salonji Aug. 1911	3rd Katsura Dec. 1911	Yamamoto Feb. 1913	2nd Okuma April 1914
Premier.....	Salonji	Katsura	Salonji	Katsura	Yamamoto	Okuma
Foreign.....	Kato Hayashi	Katsura Komura	Salonji	Katsura	Makino	Kato Okuma Ichiki
Home.....	Hara	Hirata	Hara	Oura	Hara	Okuma Oura Okuma Ichiki
Finance.....	Sakurai Matsumura	Katsura	T. Yama- moto	Wakatsuki	Takahashi	Wakatsuki Taketomi
War.....	Terauchi	Terauchi	Ishimoto	Kigoshi	Kusunose	Oka Oshima
Navy.....	Salto	Salto	Salto	Salto	Salto	Y. Hiro T. Kato
Justice.....	Matsumura Sone	Okabe	Matsumura	Matsumura	Matsumura Okada	Osaki
Education.....	Salonji Makino	Komatsu- bara	Haseba Makino	Shibata	Ooka Okada	Ichiki Takahashi
Agr. & C.....	Matsumura	Oura	Makino	Nakashoji	T. Yama- moto	Oura Kono
Com'tion.....	I. Yama- gata, Hotta	S. Goto	Hayashi	S. Goto	Matoda	Taketomi Minoura

(Continued)

	Terauchi Oct. 1916	Hara Oct. 1918	Takahashi Nov. 1921	Kato (Admiral) June 1922	Yamamoto Sept. 1923
Premier.....	Terauchi	Hara	Takahashi	Kato	Yamamoto
Home.....	Goto	Tokonami	Tokonami	Mizuno	Goto
Foreign.....	Terauchi Motono	Uchida Hara	Uchida	Uchida	Yamamoto Ijima
War.....	Oshima	Tanaka Yamanashi	Yamanashi	Yamanashi	Tanaka
Navy.....	Kato	Kato	Kato	Kato Takarabe	Takarabe
Finance.....	Shoda	Takahashi	Takahashi	Ichiki	Inouye
Justice.....	Matsumura	Oki	Oki	Okano	Hiranuma
Education.....	Okada	Nakahashi	Nakahashi	Kanada	Okano
Agr. & Com.....	Nakashoji	Yamamoto	Yamamoto	Araki	Den, Okano
Com'tion.....	Den	Noda	Noda	Mayeda	Inukai
Railways.....	—	Moeda	Matoda	Oki	Yamanouchi

(Continued)	Kiyoura Jan. 1924	Kato June 1924	2nd Kato August 1925	Wakatsuki January 1926	Tanaka Apr. 1927
Premier	Kiyoura	Kato	Kato	Wakatsuki	Tanaka
Foreign	Matsumi	Shidehara	Shidehara	Shidehara	Tanaka
Home	Mizuno	Wakatsuki	Wakatsuki	Wakatsuki Hamaguchi	Suzuki Mochizuki
Finance	Shoda	Hamaguchi	Hamaguchi	Hamaguchi Hayami Kataoka	Takahashi Mitsuchi
War	Ugaki	Ugaki	Ugaki	Ugaki	Shirakawa
Navy	Murakami	Takarabe	Takarabe	Takarabe	Okada
Justice	Suzuki	Yokota Ogawa	Egi	Egi	Hara
Education	S. Egi	Okada	Okada	Okada	Mitsuchi Mizuno Shoda
(Agr. & Com.....)	Mayeda	Takahashi		Hayami	Yamamoto
Agr. & Forestry		Okazaki	Hayami	M. Chida	
Com. & Industry		Noda	Kataoka	Kanuma	Nakahashi
				Fujisawa	
Com'missions	Fujimura	Inukai	Adachi	Adachi	Mochizuki
Railways	Komatsu	Adachi Sengoku	Sengoku	Sengoku Inouye	Kunura Ogawa

III. IMPERIAL DIET

The House of Peers

The House of Peers is composed of (a) Princes of the Blood; (b) Peers of the order of Princes and Marquises who are to sit in the House by virtue of their rights when they attain the age of thirty; (c) Representatives of the Peers of the order of Counts, Viscounts and Barons, who are elected from among their respective orders; (d) Men of erudition or of distinguished services nominated by the Emperor; (e) Four members of the Imperial Academy elected from among the members thereof and nominated by the Emperor; (f) Representatives of the highest tax payers elected by means of mutual election from among the highest tax payers in each prefecture, the number thereof being fixed as one or two for each prefecture. The number of members representing each of three inferior orders of the Peerage is fixed as 18 for Counts, 66 for Viscounts and 66 for Barons. (Further details are given elsewhere in this chapter. Ed. J. Y. B.)

The House was composed, on April 20, 1928, on the occasion of the convocation of the 55th session, as follows:

Princes of Blood	20	Imperial Nominees	120
Princes	15	Imperial Academy Members	4
Marquises	31	Highest Tax Paying Mem-	
Counts	18	bers	66
Viscounts	66	Total	405
Barons	65		

The present President of the House is Prince I. Tokugawa (appointed in 1903), and Vice-President Marquis M. Hachisuka (appointed in 1924), Chief Secretary being T. Naruse.

House of Representatives

According to the new election law passed in the 50th session of the Imperial Diet in 1925, which was put in force in the

general election held in 1928, the House is composed of members elected by male Japanese subjects of not less than 25 years of age, who are qualified for eligibility to the franchise with some exceptions. The whole country is divided into 119 electoral districts, Formosa and other colonies being excluded of course, each district returning from 3 to 5 members to the House, and total number of members is fixed at 466. A general election is to take place every four years, and election is carried on by secret ballot, one vote for one man. The allotting of seats by the Law of 1900 was 305 for the rural districts and 75 for the urban districts, while it stands now at 352 and 112 respectively.

Sessions of House and Dissolutions

The chronological lists of sessions of the Lower House from the first is as follows; those marked * being the dissolved sessions:—

Session	Period of sitting	President	Vice-President
1st....29 Nov., 1890— 8 Mar., '91			
* 2nd....29 Nov., '91—25 Dec., '91		Nakajima.	Tsuda.
3rd.... 5 May, '92—15 June, '92		T. Hoshi.	Sone.
4th....29 Nov., '92— 1 Mar., '93		Do.	Kusumoto.
* 5th....28 Nov., '93—30 Dec., '93		Kusumoto.	I. Abel.
* 6th....16 May, '94— 2 June, '94		Do.	K. Kataoka.
7th....18 Oct., '94—22 Oct., '94			
8th....24 Dec., '94—27 Mar., '95		Do.	S. Shimada.
9th....28 Dec., '95—29 Mar., '96			
10th....25 Dec., '96—24 Mar., '97			
* 11th....24 Dec., '97—25 Dec., '97		K. Hatoyama.	Do.
* 12th....19 May, '98—10 June, '98		K. Kataoka.	Do.
13th.... 3 Dec., '98—10 Mar., '99			
14th....22 Nov., '99—24 Feb., '00			
15th....25 Dec., '00—23 Mar., '01		K. Kataoka.	Motoda.
16th....10 Dec., '01—10 Mar., '02			
* 17th.... 9 Dec., '02—28 Dec., '02			
18th....12 May, '03— 5 Jun., '03		Do.	Sugita.
* 19th....10 Dec., '03—11 Dec., '03		H. Kono.	Do.
20th....20 Mar., '04—30 Mar., '04			
21st....30 Nov., '04—28 Feb., '05		M. Matsuda.	K. Minoura.
22nd....28 Dec., '05—27 Mar., '06			
23rd....28 Dec., '06—28 Mar., '07		T. Sugita.	Do.
24th....24 Dec., '07—28 Mar., '08			
25th....28 Dec., '08—25 Mar., '09			
26th....24 Dec., '09—24 Mar., '10			
27th....24 Dec., '10—24 Mar., '11		S. Haseba.	R. Koezuka.
28th....24 Dec., '11—24 Mar., '12			
29th....21 Aug., '12—23 Aug., '12			
30th....24 Dec., '12—26 Mar., '13		I. Ooka.	N. Seki.
31st....26 Dec., '13—26 Mar., '14		I. Ooka, S. Haseba, H. Oku.	Do.
32nd.... 5 May, '14— 8 May, '14			
33rd....20 June, '14—26 June, '14			
34th.... 3 Sept., '14— 9 Sept., '14		H. Oku.	Do.
* 35th.... 7 Dec., '14—25 Dec., '14			

36th....	30 May,	'15—10 June,	'15		T. Hanaf.
37th....	1 Dec.,	'15—29 Feb.,	'16	S. Shimada.	Do.
38th....	27 Dec.,	'16—25 June,	'17		S. Hayami.
39th....	22 June,	'17—15 July,	'17		
40th....	22 Dec.,	'17—26 Mar.,	'18		
41st....	27 Dec.,	'18—27 Mar.,	'19	I. Ooka.	K. Hamada.
*42nd....	26 Dec.,	'19—16 Feb.,	'20		
43rd....	29 June,	'20—30 July,	'20	S. Oku.	Y. Kasuya.
44th....	25 Dec.,	'20—27 Mar.,	'21	Do.	Do.
45th....	25 Dec.,	'21—25 Mar.,	'22	Do.	Do.
46th....	27 Dec.,	'22—27 Mar.,	'23	Y. Kasuya.	G. Matsuda.
47th....	11 Dec.,	'23—23 Dec.,	'23	Do.	Do.
*48th....	27 Dec.,	'23—31 Jan.,	'24	Do.	Do.
49th....	28 June,	'24—19 July,	'24	Do.	M. Koizumi.
50th....	24 Dec.,	'24—31 Mar.,	'25	Do.	Do.
51st....	24 Dec.,	'25—31 Mar.,	'26	Do.	Do.
52nd....	24 Dec.,	'26—25 Mar.,	'27	Do.	Do.
53rd....	3 May,	'27— 8 May,	'27	S. Morita.	G. Matsuura.
*54th....	26 Dec.,	'27—21 Jan.,	'28	Do.	Do.
55th....	20 Apr.,	'28— 7 May,	'28	H. Motoda.	I. Kiyose.

Chief Secretary of the House.—T. Nakamura.

Sittings.—Ordinary sessions are generally convoked between November and December and last three months. After effecting the organization towards the end of December the House adjourns for about one month, so that its actual working time does not exceed two months.

General Election

The general election takes place every four years, this being the regular term for Commons. The extraordinary session must according to the Constitution be convened within five months from the date of dissolution. In general three or four months intervene from the date of dissolution to that of general election. Of the 15 general elections carried out from the 1st election in 1890 only two, i.e. those of 1908 and 1912, were regular and were held after the natural expiry of the 4 year term.

Elections and the Relative Party Strength

Leaving out of account all those minor groups of temporary existence, the relative strength of those permanent parties as at the close of the respective sessions recently is shown below:—

	Mitsuto (Kaiweikai)	Seiyukai	Seiyu Honto	Jitsugyo Doshikai	Neutral	Others	Total
55th (April '28)	217	219	—	4	14	12	466
54th (Dec. '27)	222	189	—	9	15	29	464
53rd (May '27)	163	175	65	9	15	37	464
52nd (Mar. '27)	163	165	65	9	25	37	464
51st (Mar. '26)	165	162	87	9	15	26	464

Number of Franchise-Holders.—The lowering of property qualification and the extension of the privilege to new urban

districts has resulted in the marked increase of franchise-holders. The amended election law enacted in 1920 increased the number to 2,860,000 representing about 5.2 per cent. of Japan's population, the property restriction being lowered from ¥10 to 3 of direct national tax. At the same time the old small constituency system was restored.

Election	M.P.'s	Franchise-holders (1,000)	Franchise-holders per 1 member	Franchise-holders per 1,000 pop.	% of Voting	
					Voters	Absentees
1st (1890)...	300	467	1,550	11.42	—	—
10th (1908)...	379	1,582	4,176	32.80	85.72	14.28
14th (1920)...	464	3,069	6,166	46.33	86.70	13.30
15th (1924)...	464	3,341	7,199	57.01	91.18	8.82
16th (1928)...	466	12,530	26,889	209.75	80.90	19.10

Profession of the Members.—Comparing the professions of the members returned in the general election of 1902 with that of 1908, 1920 and 1924, the decrease of farmer members and increase of those of other origins are quite noticeable, the figures showing relative percentage:—

	Election				
	5th	10th	14th	15th	16th
Civil and Military.....	0.7	0.3	6.5	3.2	10.2
Medicine	1.3	1.9	1.7	3.0	2.2
Journalists	2.7	4.5	5.4	6.5	7.3
Lawyers	8.3	16.9	14.7	13.8	15.6
Business-men	17.0	16.1	28.4	27.8	22.2
Farmers	48.7	27.4	20.0	17.9	9.5
Mnf. and Miners.....	1.7	3.2	5.8	5.0	9.7
Others	4.3	6.3	3.5	5.8	5.2
No Profession	15.3	23.5	14.0	17.0	18.1

Age of the Members.—The average is gradually increasing as follows, the figures in percentage:—

Election	30-39	40-49	50-59	60 or over
1st (1890).....	51.3%	35.0	10.0	3.7
5th (1902)...	35.0	47.0	15.0	3.0
10th (1912)...	16.1	46.4	34.0	3.4
14th (1920)...	12.9	32.3	41.2	13.6
15th (1924)...	14.2	37.7	38.2	9.9
16th (1928)...	7.9	38.6	34.8	18.7

Violation of Election Rules.—The record from the 1st election is as follows:—

Election	Imprisoned	Penalty	Acquitted	Unseated	Total
1st (1890)	26	211	47	—	286
2nd	65	183	69	4	323
3rd-4th	217	504	403	24	1,155
5th-6th	249	611	152	15	1,029
7th	173	1,348	335	5	1,861
8th	140	1,642	212	2	1,998
9th	25	230	28	1	284
10th (1908)...	128	1,419	274	—	1,921
11th	325	3,437	188	—	3,950
12th (1915)...	448	7,194	671	19	8,332
13th (1917)...	1,283	21,245	319	530	23,377
14th (1920)...	148	5,166	145	37	5,496
15th (1924)...	56	9,434	35	1,825	11,351

Review of the 54th & 55th Sessions

The 54th session (Dec. 27—Jan. 21) of the House of Representatives was the last sitting under the old restrictive election system, and after the usual year-end adjournment it resumed sitting on January 28, 1928 amidst circumstances of intense strain. The Opposition that was in majority was in no mood to tolerate the Seiyu-kai Government while the latter met the Opposition tactics with the grim determination of dissolution. The only business done was the address by Baron Tanaka as Minister-President and Foreign Minister and by the Finance Minister to both Houses, for before the non-confidence motion introduced by the Opposition could be discussed the Imperial Rescript ordering dissolution of the House of Representatives was read and the members dispersed amidst loud cheers of "Banzai".

The 55th session (April 20—May 7) was an extraordinary assembly convoked chiefly to vote the Coronation expense amounting to ¥15,914,000. The House was suspended twice, three days each time, as the Government lacked confidence to reject the Opposition's non-confidence motion. So slender was the margin between the two opposing parties that neither could hope to carry its own decision on its own strength. A few handful of Independents, of whom eight Shinsei-kai M.P.s stood out prominent, found themselves in the supreme position of deciding the issue. It was with their support that the Opposition's impeachment of the Home Minister was passed, and it was through their manipulation that the non-confidence motion was put off discussion till the Speaker declared the session closed at 11.50 p.m. of the last day (6th). After voting the Coronation bill with an acclaim the two major parties practically occupied themselves with devising tricks and dodges for winning over "Independents" or enticing Opposition M.P.s open to persuasion. The 55th session in short afforded to minor parties a unique opportunity of directing the policy of the larger. The Business-men with only 4 seats in the House, for instance, obliged the Government, as price for their support, to adopt their long desired program of lowering the scale of the business tax, raising the allowance of soldiers, and so forth. The eight Proletarian members stood aloof from the unsightly squabbles of the Ministerial and Opposition parties for majority. Thus ended the first session following the Manhood Suffrage election.

LIST OF MEMBERS OF THE HOUSE OF PEERS

Princes of the Blood

Asaka, Yasuhiko
Chichibu, Yasuhito
Fushimi, Hiroyasu
Fushimi, Hiroyoshi
Fushimi, Kuniyoshi
Higashi-Kuni, Naruhiko
Kan-in, Haruhito
Kan-in, Kotohito

Kaya, Tsunenori
Kuni, Asakira
Kuni, Kunihiko
Kuni, Taka
Nashimoto, Morimasa
Takamatsu, Nobuhito
Yamashina, Takehiko

Princes

Ichijo, Sanetaka

Ito, Hirokuni
 Konoe, Fumimaro
 Kujo, Michizane
 Matsukata, Iwao
 Mori, Motoaki
 Oyama, Kashiwa
 Salonji, Kimmochi
 Sanjo, Kimiteru
 Shimazu, Tadashige
 Takatsukasa, Nobusuke
 Tokudaiji, Kinhiro
 Tokugawa, Iyesato

Marquises

Asano, Nagakoto
 Daigo, Tadashige
 Hachisuka, Masaakira
 Hirohata, Tadataka
 Hosokawa, Moritatsu
 Ikeda, Nakahiro
 Inouye, Katsumosuke
 Kido, Yukikazu

Kikutel, Kimfosa
 Komatsu, Teruhisa
 Komura, Kin-ichi
 Kuga, Tsunemichi
 Kuroda, Nagashige
 Maeda, Toshitame
 Matsudaira, Yasutaka
 Nabeshima, Naoakira
 Nakamikado, Tsuneyasu
 Nakayama, Sukechika
 Nozu, Shizunosuke
 Okubo, Toshikazu
 Okuma, Nobutsune
 Saga, Kinkatsu
 Saigo, Yorinori
 Sasaki, Yukitada
 Satake, Yoshiharu
 Shijo, Takachika
 Tokugawa, Kuniyori
 Tokugawa, Yorisada
 Tokugawa, Yoshichika
 Yamanouchi, Toyokage
 Yamashina, Yoshimaro

Counts, Viscounts and Barons

Counts

Futara, Yoshinori
 Hayashi, Hirotaro
 Hotta, Masatsune
 Kabayama, Aisuke
 Kawamura, Tetsutaro
 Kodama, Hideo
 Kuroki, Sanji
 Matsudaira, Yoritoshi
 Matsuki, Munetaka
 Matura, Atsushi
 Mizoguchi, Naosuke
 Ogasawara, Nagamoto
 Okudaira, Masayasu
 Sakai, Tadakatsu
 Sakai, Tadamasa
 Terajima, Sei-ichiro
 Yanagisawa, Yasutoshi
 Yanagiwara, Yoshimitsu

Viscounts

Akita, Shigesuye
 Akizuki, Tanehide
 Akimoto, Harutomo
 Aoki, Nobumitsu
 Ayakoji, Mamoru
 Fujitani, Tamehiro
 Funabashi, Kiyokata
 Gojo, Iko
 Hachijo, Takamasa

Hanabusa, Taro
 Higashizono, Motomitsu
 Higuchi, Seiko
 Honda, Tadahoko
 Hoshina, Masaaki
 Ijūin, Kanetomo
 Ikeda, Masatoki
 Imajo, Sadamasa
 Inagaki, Taisho
 Inouye, Kyoshiro
 Ishikawa, Narihida
 Ito, Jiromaru
 Ito, Sukehiro
 Itsutsuji, Harunaka
 Iwaki, Takanori
 Katagiri, Sadanaka
 Kiyooka, Nagakoto
 Kusushi, Ryutoku
 Maeda, Toshisada
 Makino, Tadaatsu
 Makino, Kazushige
 Matsudaira, Naohira
 Matsudaira, Yasuharu
 Mimuroto, Keiko
 Mizuno, Choku
 Mori, Takanori
 Mori, Toshinari
 Nabeshima, Naotada
 Nishioji, Yoshimitsu
 Nishio, Tadakata

Nomura, Masuzo
 Ogochi, Masatoshi
 Ogochi, Terutake
 Ogura, Hidesuye
 Okubo, Ritsu
 Oura, Kaneichi
 Reizei, I-yu
 Saisho, Atsuhide
 Shirakawa, Sukenaga
 Shinjo, Naotomo
 Soga, Sukekuni
 Tachibana, Tanetada
 Takakura, Naganori
 Takiwaki, Hiromitsu
 Toyooka, Keishi
 Tozawa, Masami
 Uramatsu, Tomomitsu
 Watanabe, Chifuyu
 Watanabe, Shichiro
 Yabu, Atsumaro
 Yagyu, Toshihisa
 Yonekura, Shotatsu
 Yonezawa, Masakata
 Yoshida, Seifu

Barons

Adachi, Yutaka
 Akamatsu, Norikazu
 Arichi, Tozaburo
 Chiaki, Suyetaka
 Cho, Mototsura
 Fujimura, Yoshiro
 Fujita, Heltaro
 Fukuhara, Toshimaru
 Funakoshi, Mitsuhojo
 Go, Seinosuke
 Ikeda, Nagayasu
 Imaeda, Naonori
 Imazono, Kunisada
 Inada, Masauye
 Inouye, Kiyosumi
 Ito, Bunkichi
 Ito, Yasukichi
 Iwakura, Michitomo
 Iye, Asasuke
 Kamimura, Yoriyoshi
 Kamiyama, Gunsho
 Kaneko, Arimichi
 Kato, Sadakichi
 Kigoshi, Yasutsuna
 Kino, Toshihide
 Kitagawara, Kimihira
 Kitajima, Kikou
 Kitaoji, Sanenobu
 Kondo, Shigey
 Kuroda, Nagakazu
 Kurokawa, Kantaro

Matsuoka, Kimpel
 Nabeshima, Naouki
 Nakajima, Kumakichi
 Nambu, Mitsuomi
 Niho, Masamaro
 Nishi, Shinrokuro
 Noda, Kameki
 Obata, Daitaro
 Ohara, Senkichi
 Oki, Sadao
 Oi, Narumoto
 Otera, Junzo
 Otori, Fujitaro
 Sakamoto, Toshitsugu
 Sakatani, Yoshiro
 Sato, Tatsujiro
 Seki, Yoshihisa
 Senda, Kahel
 Shiba, Chuzaburo
 Sufu, Kanemichi
 Tachibana, Shotchiro
 Takagi, Kikan
 Takasaki, Yumihiko
 Terajima, Toshizo
 Todo, Takanari
 Togo, Yasushi
 Tsuboi, Kubachiro
 Tsuji, Taro
 Uyeda, Heikichi
 Usagawa, Kazumasa
 Watanabe, Shuji
 Yabuki, Shozo
 Yamanouchi, Nagato
 Yamane, Buryo
 Yasuba, Suyeyoshi

Imperial Nominees

Adachi, Tsunayuki
 Akaike, Atsushi
 Anraku, Kanemichi
 Arai, Kentaro
 Asada, Tokunori
 Baba, Eiichi
 Banzai, Rihachiro
 Egi, Yoku
 Fujita, Ken-ichi
 Fujita, Shiro
 Fujiyama, Ratta
 Fukuhara, Ryojiro
 Fukunaga, Yoshinosuke
 Futakami, Heiji
 Goto, Shimpel, Visc.
 Hanai, Takuzo
 Hara, Yasutaro
 Hashimoto, Keizaburo
 Hattori, Ichizo
 Hattori, Kintaro

- | | |
|----------------------------|----------------------------|
| Hijikata, Nei | Ohashi, Shintaro |
| Hojo, Tokiyoshi | Oka, Kishichiro |
| Ichiku, Otohiko | Okada, Bunji |
| Inahata, Katsutaro | Okada, Ryohel |
| Inouye, Junnosuke | Okawa, Heizaburo |
| Inuzuka, Katsutaro | Okazaki, Kunisuke |
| Ishii, Kikujiro, Visc. | Okubo, Toshitaka |
| Ishii, Seichiro | Oshima, Ken-ichi |
| Ishiwara, Kenzo | Ota, Masahiro |
| Ishiwata, Bin-ichi | Otani, Son-yu |
| Ishizuka, Elzo | Otani, Yasushi |
| Izawa, Takio | Otsu, Jun-ichiro |
| Kabayama, Sukehide | Oyama, Tsunamasa |
| Kabuto, Kuninori | Sakamoto, Sannosuke |
| Kamada, Elkichi | Samejima, Takenosuke |
| Kamino, Katsunosuke | Saneyoshi, Yasuzumi, Visc. |
| Kamiyama, Mitsunoshin | Satake, Sango |
| Kanasugi, Elgoro | Sato, Sankichi |
| Kano, Jigoro | Seki, Naohiko |
| Kasai, Shin-ichi | Sengoku, Mitsugu |
| Kato, Masanosuke | Shidehara, Kijuro, Baron |
| Kawakami, Chikaharu | Shimizu, Keichiro |
| Kawamura, Jozaburo | Shimura, Gentaro |
| Kawamura, Takeji | Shisa, Katsu |
| Kawasaki, Takukichi | Shoda, Kazue |
| Kimura, Seishiro | Soyeda, Juichi |
| Kitazato, Shihaburo, Baron | Sugawara, Michiyoshi |
| Koba, Sadanaga | Sugita, Teiichi |
| Komatsu, Kenjiro | Suyenobu, Dosel |
| Kurachi, Tetsukichi | Suzuki, Kisaburo |
| Kurooka, Tatewaki | Tadokoro, Yoshiharu |
| Makoshi, Kyohel | Takahashi, Takuya |
| Mano, Bunji | Takata, Sanae |
| Matsui, Keishiro, Baron | Takekoshi, Yosaburo |
| Matsumoto, Joji | Taketomi, Tokitoshi |
| Matsumura, Gi-ichi | Tamari, Kizo |
| Minami, Hiroshi | Tanaka, Giichi, Baron |
| Miyake, Hizu | Terada, Sakae |
| Miyata, Mitsuo | Tokutomi, Ichihiro |
| Mizukami, Chojiro | Tomiya, Seitaro |
| Mizuno, Rentaro | Tsukamoto, Seiji |
| Mori, Kengo | Uchida, Kakichi |
| Matsumoto, Gokichi | Uchida, Shigenari |
| Murakami, Keijiro, Baron | Uzawa, Somel |
| Murota, Yoshibumi | Wada, Hikojiro |
| Nabeshima, Keijiro | Wakabayashi, Raizo |
| Nagata, Hidejiro | Wakao, Shohachi |
| Naito, Kyukan | Wakatsuki, Reijiro |
| Nakagawa, Kojuro | Watanabe, Chiyosaburo |
| Nakamura, Junkuro | Watanabe, Cho |
| Nezu, Kaichiro | Yamakawa, Hashiwo |
| Nio, Koremochi | Yamamoto, Tatsuo, Baron |
| Nishikubo, Hiromochi | Yamanouchi, Kazutsugu |
| Nishino, Moto | Yuasa, Kurahel |
| Nitobe, Inazo | Yuchi, Kohel |
| Nomura, Tokushichi | Yuchi, Sadanori |

**Imperial Academy
Representatives**

Uyeda, Man-nen, Dr. Lit.

Onozuka, Kihelji, L.D.

Fujisawa, Rikitaro, Dr. Sc.

Tanakadate, Aikitsu, Dr. Sc.

Highest Tax Payers

(In Sept. 1925 was held the first election of the members of the House of Peers representing the highest tax payers throughout the country, in accordance with the revised law which increased the number from 45 to 66. Of the newly appointed members, 28 were identified with the Kenseikai Party, 14 the Seiyukai Party, 8 the Seiyu-honto Party, while 16 were independents, according to the returns of the Home Office.)

Fujiyasu, T. (Kagoshima)	Okuda Elnoshin (Kagoshima)
Hama, Helyemon (Ibaraki)	Okuda, Kamezo (Tottori)
Hamaguchi, Gihei (Chiba)	Oshiro, Kaneyoshi (Okinawa)
Hashimoto, M. (Fukushima)	Ota, Seizo (Fukuoka)
Hayashi, Heishiro (Yamaguchi)	Ozaki, Motojiro (Shizuoka)
Hirata, Yoshitane (Oita)	Saito, Kijuro (Niigata)
Homma, Chiyokichi (Gumma)	Saito, Yasuo (Saltama)
Igarashi, Jinzo (Niigata)	Saito, Zempachi (Saltama)
Imai, Gosuke (Nagano)	Sakata, Tei (Kumamoto)
Ishikawa, Saburo (Saga)	Sasaki, Shigaji (Okayama)
Isokai, Ko (Aichi)	Sawada, Yoshihiko (Kumamoto)
Itaya, Miyakichi (Hokkaido)	Sawayama, S. (Nagasaki)
Itoharu, Taketaro (Shimane)	Segawa, Yaemon (Iwate)
Izawa, Heizaemon (Miyagi)	Setani, Yujiro (Ibaraki)
Joro, Selsuke (Kanagawa)	Sugezawa, Shigeo (Chiba)
Kaneko, Motosaburo (Hokkaido)	Takahashi, Genjiro (Miyazaki)
Kazama, Hachizaemon (Kyoto)	Takahiro, Jihei (Toyama)
Kitamura, Soshiro (Nara)	Tamura, Komajiro (Osaka)
Kobayashi, Cho (Nagano)	Tamura, Shinkichi (Hyogo)
Kobayashi, Kahelji (Miye)	Tanaka, Kazuma (Kyoto)
Koshio, H. (Kanagawa)	Tsuchida, Mansuke (Akita)
Kudo, Hachinosuke (Yamagata)	Tsukul, Hikoshichi (Tochigi)
Matsumoto, K. (Hiroshima)	Tsumura, Jusha (Tokyo)
Miki, Yokichiro (Tokushima)	Uda, Tomoshiro (Kochi)
Mori, Heibel (Osaka)	Wakao, K. (Yamanashi)
Mori, Hirosaburo (Fuku)	Yagi, Haruki (Ehime)
Morimoto, Zenshichi (Aichi)	Yamada, Kei-ichi (Kagawa)
Morita, Fukuichi (Hiroshima)	Yamakami, Iwaji (Okayama)
Nagao, Gentaro (Gifu)	Yamazaki, Kamekichi (Tokyo)
Nakamura, Y. (Shizuoka)	Yokoyama, Akira (Ishikawa)
Narumi, Shujiro (Aomori)	Yoshida, Yojiro (Shiga)
Nishimoto, K. (Wakayama)	Yoshino, Shutaro (Fukushima)
Okazaki, Tokichi (Hyogo)	Yoshiwara, Masataka (Fukuoka)

**LIST OF MEMBERS OF THE HOUSE OF
REPRESENTATIVES**

Result of the general election carried out in Feb. 1928:

	Feb. election	Before dissolution
Minsei-to	217	219
Seiyu-kai	219	190
Kakushin Club	4	26

	Feb. election	Before dissolution
Jitsugyo Doshikai ..	4	8
Independents	14	Ind. & others 21
Proletarians	8	—
Total	466	464

The strength of different parties in the House at the end of the 55th session (April '28) stood as follows:

Minsel-to	214
Seyu-kai	216
Jitsugyo Doshikai	4
Meisei-kai	8
Proletarian	8
Independent (or neutral).....	15
Vacancies	1
Total	466

In the following list (S.) stands for Seiyukai, (M.) for Minseitō (former Kenseikai and Seiyu-hontō), (J.) for Jitsugyo Doshikai, (P.) for Proletarians, (K.) for Kakushinto, and (I.) for Independents. Figures in the brackets indicate the number of M.P.'s for the given district.

Abe, Isao	(P)	Tokyo city	
Abe, Kunitaro	(M)	Niigata	1.
Adachi, Kenzo	(M)	Kumamoto	2.
Akao, Tokichiro	(S)	Kanagawa	2.
Akatsuka, Shosuke	(M)	Kagoshima	2.
Akita, Kiyoshi	(S)	Tokushima	1.
Anamizu, Yoshichi	(S)	Yamanashi	
Ando, Masazumi	(S)	Tokyo city	
Aoki, Raizaburo	(S)	Hyogo	3.
Aoki, Seiichi	(S)	Gumma	1.
Aoyama, Kenzo	(S)	Ishikawa	2.
Arima, Hideo	(S)	Fukuoka	3.
Asahara, Kenzo	(P)	Fukuoka	2.
Asaishi, Keihachi	(S)	Tokushima	1.
Asakawa, Ko	(M)	Hokkaido	2.
Awayama, Hiroshi	(M)	Fukushima	1.
Bando, Kotaro	(M)	Hokkaido	2.
Chiba, Saburo	(J)	Chiba	3.
Danno, Reisuke	(S)	Hokkaido	4.
Del, Heikichi	(S)	Saitama	3.
Den, Sho	(M)	Hyogo	5.
Doi, Gontai	(S)	Hyogo	4.
Ebizawa, Tamejiro	(M)	Ibaraki	3.
Endo, Ryusaku	(I)	Saitama	3.
Fujii, Keiichi	(M)	Yamaguchi	1.
Fujii, Tatsuya	(S)	Aomori	1.
Fujinuma, Shohel	(S)	Tochigi	2.
Fujisawa, Ikunosuke	(M)	Miyagi	1.
Fujita, Wakamizu	(M)	Hiroshima	1.
Fujiwara, Yonezo	(I)	Kobe city	
Fukamizu, Kiyoshi	(M)	Kumamoto	2.
Fukuda, Goro	(M)	Saga	1.

Fukui, Jinzo	(M)	Nara	
Furihata, Mototaro	(M)	Nagano	4.
Futakami, Shunkichi	(S)	Ehime	3.
Futami, Jingo	(M)	Miyazaki	
Gunya, Teruichiro	(S)	Shizuoka	2.
Hamada, Kunimatsu	(S)	Miye	2.
Hamaguchi, Yuko	(M)	Kochi	1.
Hanabusa, Yoshihiko	(S)	Kagoshima	3.
Hanashiro, Nagato	(S)	Okinawa	
Hara, Bujiro	(M)	Shimane	1.
Hara, Ko	(M)	Kagoshima	1.
Hara, Shujiro	(M)	Ibaraki	3.
Hara, Sobei	(S)	Hyogo	4.
Harada, Jue	(S)	Kumamoto	1.
Harada, Sanoji	(M)	Tokushima	1.
Hashimoto, Teikichi	(S)	Ishikawa	1.
Hata, Toyosuke	(S)	Saitama	1.
Hatoyama, Ichiro	(S)	Tokyo city	
Hatta, Sakichi	(S)	Tokushima	2.
Hayashi, Helma	(M)	Tokushima	2.
Hayashi, Kotaro	(M)	Hokkaido	2.
Hida, Tokuji	(S)	Hiroshima	2.
Higashi, Takeshi	(S)	Hokkaido	2.
Higuchi, Hideo	(M)	Nagano	3.
Hikida, Elkichi	(S)	Gifu	1.
Hirade, Kisaburo	(M)	Hokkaido	3.
Hiraga, Shu	(S)	Osaka city	
Hirai, Shinshiro	(S)	Gifu	3.
Hirakawa, Matsutaro	(M)	Kanagawa	3.
Hirayama, Iwahiko	(M)	Kumamoto	1.
Hirooka, Uichi	(S)	Hyogo	2.
Hirose, Tamehisa	(S)	Iwate	2.
Hirose, Tokuzo	(M)	Osaka city	
Hisa, Seiji	(S)	Tokushima	3.
Hisatsune, Sadao	(S)	Fukuoka	2.
Honda, Eisaku	(M)	Nagasaki	1.
Honda, Sadajiro	(M)	Chiba	1.
Honda, Tsunenori	(M)	Nagasaki	2.
Horikiri, Zembel	(S)	Fukushima	1.
Hoshijima, Jiro	(S)	Okayama	2.
Ichimatsu, Sadakichi	(M)	Osaka city	
Ichimiya, Fusaji	(M)	Oita	1.
Ide, Shigesaburo	(S)	Akita	2.
Ihara, Gorobei	(S)	Nagano	3.
Iimura, Goro	(S)	Ibaraki	3.
Iizuka, Harutaro	(M)	Gumma	1.
Iizuka, Tomonobu	(M)	Niigata	3.
Ikeda, Keihachi	(M)	Miye	2.
Ikeda, Kameji	(S)	Akita	3.
Ikeuchi, Hiromasa	(S)	Akita	1.
Ikuta, Wabel	(S)	Tokushima	1.
Imai, Takehiko	(S)	Chiba	2.
Imoto, Tsunesaku	(M)	Gumma	2.
Inoguchi, Nobujiro	(S)	Miye	1.
Inoue, Goichi	(M)	Shizuoka	3.
Inoue, Takaya	(S)	Gifu	2.

Inukai, Ki	(S)	Okayama	2.
Irei, Hajime	(M)	Okinawa	
Isaka, Toyomitsu	(M)	Osaka	6.
Isaka, Hidegoro	(S)	Miye	1.
Ishii, Bungoro	(S)	Fukushima	2.
Ishii, Jiro	(S)	Saga	
Ishii, Saburo	(S)	Ibaraki	2.
Ishikawa, Hiroshi	(M)	Osaka city	
Ishizaka, Yohei	(S)	Saitama	2.
Ishizuka, Saburo	(M)	Niigata	2.
Ishizuka, Toyochi	(S)	Toyama	1.
Isobe, Sho	(S)	Tokyo city	
Isobe, Seikichi	(S)	Kyoto	2.
Isono, Yoko	(S)	Yokohama city	
Itaya, Junsuke	(S)	Hokkaido	4.
Ito, Nitaro	(S)	Tokyo city	
Iwakawa, Yosuke	(I)	Kagoshima	1.
Iwakiri, Shigeo	(M)	Kagoshima	1.
Iwamoto, Busuke	(S)	Nara	
Iwasaki, Kazutaka	(S)	Ehime	
Iwasaki, Kojiro	(S)	Osaka	5.
Kambe, Tamezo	(M)	Hokkaido	4.
Kamel, Kanichiro	(P)	Fukuoka	2.
Kamewari, Yasuzo	(S)	Okinawa	
Kamijo, Shin	(S)	Nagano	4.
Kamino, Yasutaro	(S)	Toyama	2.
Kamizuka, Tsukasa	(S)	Kumamoto	2.
Kanazawa, Yasunosuke	(M)	Fukushima	2.
Kanda, Masao	(M)	Tochigi	2.
Kanemitsu, Yasuo	(S)	Oita	1.
Kanna, Norikazu	(M)	Okinawa	
Kasuya, Yoshizo	(S)	Saitama	1.
Kataoka Naoteru	(M)	Kyoto city	
Kato, Kumeshiro	(S)	Miye	1.
Kato, Ryogoro	(S)	Aichi	1.
Kato, Taiichi	(M)	Aichi	3.
Kato, Tomomasa	(S)	Niigata	2.
Katsu, Masanori	(M)	Fukuoka	4.
Katsuda, Eikichi	(M)	Osaka	5.
Kawaguchi, Yoshihisa	(S)	Kanagawa	2.
Kawahara, Mosuke	(S)	Saga	2.
Kawakami, Jotaro	(P)	Kobe city	
Kawakami, Tetsuta	(S)	Ehime	2.
Kawanishi, Toyotaro	(M)	Yamanashi	
Kawasaki, Katsu	(M)	Miye	1.
Kawasaki, Suketaro	(J)	Gifu	1.
Kawasaki, Yasunosuke	(M)	Kyoto	2.
Kawashima, Masajiro	(S)	Chiba	1.
Kihl, Sanshiro	(M)	Gumma	1.
Kimoto, Shulchiro	(S)	Wakayama	1.
Kimura, Hideoki	(M)	Miye	1.
Kimura, Kozaemon	(M)	Shimane	1.
Kimura, Seiji	(S)	Fukushima	3.
Kinoshita, Seitaro	(S)	Hokkaido	5.
Kishi, Mamoru	(M)	Shizuoka	2.
Kishida, Masaki	(S)	Hiroshima	1.

Kishimoto, Yasumichi	(M)	Miye	2.
Kiyose, Ichiro	(K)	Hyogo	4.
Kodama, Yuji	(S)	Yamaguchi	2.
Kodani, Setsuo	(S)	Okayama	2.
Kodera, Kenkichi	(M)	Hyogo	2.
Kogure, Budayu	(S)	Gumma	2.
Kohashi, Ichita	(M)	Kumamoto	1.
Koike, Niro	(M)	Hokkaido	5.
Koizumi, Matajiro	(M)	Kanagawa	2.
Koizumi, Sakutaro	(S)	Shizuoka	2.
Kokue, Miyoji	(M)	Shizuoka	1.
Komata, Masaichi	(M)	Tokyo city	
Komine, Mitsuo	(M)	Ibaraki	2.
Konishi, Wa	(M)	Kagawa	1.
Kono, Masayoshi	(M)	Ibaraki	1.
Kosaka, Junzo	(M)	Nagano	1.
Kotaki, Tatsuo	(M)	Tokyo city	
Koyama, Kanzo	(S)	Hiroshima	3.
Koyama, Kunitaro	(I)	Nagano	2.
Koyama, Kuranosuke	(M)	Miyagi	2.
Koyama, Matsutoshi	(M)	Aichi	1.
Koyama, Tanizo	(M)	Wakayama	2.
Kudo, Tetsuo	(M)	Aomori	1.
Kudo, Tomio	(S)	Aomori	2.
Kuhara, Fusanosuke	(S)	Yamaguchi	1.
Kumagai, Goemon	(M)	Fukui	
Kumagai, Iwao	(S)	Iwate	1.
Kumagai, Naota	(S)	Yamagata	2.
Kunieda, Sutejiro	(S)	Tokyo city	
Kuno, Sonshi	(M)	Aichi	3.
Kuramoto, Yoichi	(S)	Shizuoka	3.
Kurasono, Sanshiro	(M)	Kagoshima	1.
Kurihara, Hikosaburo	(M)	Tochigi	2.
Kurokane, Yasuyoshi	(M)	Yamagata	1.
Kurosumi, Seisho	(S)	Hokkaido	3.
Kurusu, Shichiro	(S)	Ibaraki	1.
Kuyama, Tomoyuki	(S)	Okayama	1.
Kuzuhara, Ihei	(S)	Yamaguchi	2.
Machida, Chuji	(M)	Akita	1.
Maeta, Fusanosuke	(M)	Hyogo	2.
Maeta, Masahachi	(M)	Hokkaido	5.
Maeta, Yonezo	(S)	Tokyo	6.
Makino, Ryoza	(S)	Gifu	3.
Makino, Shizuo	(S)	Tokyo	5.
Makiyama, Kozo	(M)	Nagasaki	2.
Manabe, Katsu	(M)	Tokushima	2.
Masuda, Gilchi	(M)	Niigata	4.
Masutani, Otozo	(S)	Yamaguchi	1.
Masutani, Torakichi	(M)	Osaka city	
Matsuda, Genji	(M)	Oita	1.
Matsuda, Mitsunori	(M)	Kagawa	2.
Matsuda, Takechiyo	(M)	Osaka	6.
Matsui, Buntaro	(J)	Fukui	
Matsumi, Kiyota	(S)	Hokkaido	4.
Matsumoto, Kumpei	(S)	Shizuoka	1.
Matsumoto, Magoemon	(S)	Fukushima	3.

Matsumoto, Tadao	(M)	Nagano	1.
Matsumura, Kenzo	(M)	Toyama	2.
Matsumura, Kozo	(S)	Tochigi	2.
Matsuno, Tsuruhei	(S)	Kumamoto	1.
Matsuno, Shiro	(M)	Nara	
Matsuoka, Toshizo	(S)	Yamagata	2.
Matsuura, Gohel	(S)	Shizuoka	1.
Miki, Bukichi	(M)	Tokyo city	1.
Mitsuchi, Chuza	(S)	Kagawa	2.
Mitsui, Tokuho	(S)	Hokkaido	5.
Miura, Kazuhei	(S)	Osaka	1.
Miura, Torao	(M)	Miyazaki	
Miwa, Ichitaro	(S)	Aichi	3.
Miyagawa, Kazumi	(S)	Fukuoka	1.
Miyahara, Kozaburo	(M)	Hiroshima	2.
Miyake, Iwao	(M)	Yokohama city	
Miyake, Rihei	(M)	Hyogo	3.
Miyako, Keizaburo	(S)	Ibaraki	3.
Miyawaki, Chokichi	(S)	Kagawa	1.
Miyazawa, Hiroshi	(S)	Hiroshima	3.
Miyoshi, Eihiro	(M)	Tottori	
Mizukubo, Jinsaku	(M)	Miyazaki	
Mizushima, Hikoichiro	(S)	Kyoto	3.
Mizutani, Chozaburo	(P)	Kyoto city	
Mochizuki, Keisuke	(S)	Hiroshima	2.
Mori, Hajime	(M)	Nagasaki	2.
Mori, Kaku	(S)	Tochigi	1.
Mori, Masanori	(S)	Hokkaido	1.
Mori, Mineichi	(M)	Saga	2.
Mori, Chokuei	(S)	Chiba	3.
Morimoto, Senkichi	(S)	Nara	
Morita, Masayoshi	(S)	Osaka city	
Morita, Shigeru	(M)	Kyoto city	
Moriya, Shigeo	(I)	Miyagi	1.
Moriyasu, Sukemasa	(M)	Hiroshima	1.
Motoda, Hajime	(S)	Osaka	2.
Mukai, Shizuo	(S)	Nagasaki	1.
Murakami, Kunikichi	(M)	Kyoto	3.
Muramatsu, Tsunechiro	(M)	Ehime	3.
Murayasu, Shinkuro	(M)	Osaka city	
Muto, Kinkichi	(S)	Gumma	1.
Muto, Shichiro	(S)	Gumma	1.
Muto, Yamaji	(J)	Osaka city	
Nagai, Ryutaro	(M)	Ishikawa	1.
Nagashima, Ryuji	(I)	Saitama	2.
Nagata, Ryokichi	(S)	Kagoshima	3.
Nagata, Zenzaburo	(M)	Shizuoka	3.
Nakagawara, Sadaki	(S)	Aomori	1.
Nakahashi, Tokugoro	(S)	Ishikawa	1.
Nakai, Kazuo	(S)	Kobe city	
Nakajima, Horoku	(S)	Miyagi	1.
Nakajima, Moritoshi	(S)	Tokyo	6.
Nakamura, Keijiro	(M)	Wakayama	1.
Nakamura, Takashi	(S)	Wakayama	2.
Nakamura, Toru	(S)	Tokyo	7.

Nakamura, Tsugio	(M)	Tokyo	6.
Nakanishi, Rokusaburo	(M)	Hokkaido	1.
Nakano, Seigo	(M)	Fukuoka	1.
Nakano, Takeo	(S)	Kumamoto	2.
Nakashima, Yadanji	(M)	Tokyo city	
Nakatani, Sadayori	(S)	Kochi	1.
Nakawa, Kan-ichi	(S)	Hiroshima	1.
Nakayama, Sadao	(S)	Kumamoto	2.
Nakazaki, Toshihide	(M)	Ibaraki	1.
Narukiyo, Shinai	(S)	Osaka	2.
Narumi, Bunshiro	(S)	Aomori	2.
Nishi, Eitaro	(M)	Saga	2.
Nishikata, Toshima	(S)	Yamagata	1.
Nishimura, Shigeo	(S)	Yamaguchi	2.
Nishimura, Tanjiro	(M)	Okayama	2.
Nishio, Suehiro	(P)	Osaka city	
Nishioka, Takejiro	(S)	Nagano	1.
Nishiwaki, Shin	(M)	Aichi	2.
Noda, Bunichiro	(M)	Kobe city	1.
Noda, Shunsaku	(S)	Fukuoka	3.
Nomura, Karoku	(M)	Toyama	1.
Nonaka, Tetsuya	(M)	Saitama	3.
Norimoto, Yoshiyasu	(M)	Nagasaki	1.
Numata, Kaichiro	(M)	Osaka city	
Oasa, Tadao	(M)	Kumamoto	1.
Ogawa, Gotaro	(M)	Okayama	2.
Ogawa, Heikichi	(S)	Nagano	3.
Oguchi, Kiroku	(S)	Aichi	5.
Ohashi, Matabei	(S)	Shizuoka	3.
Okada, Tadahiko	(S)	Okayama	1.
Okada, Itaro	(S)	Hokkaido	1.
Okamoto, Jitsutaro	(M)	Aichi	4.
Okamoto, Kansuke	(M)	Hokkaido	4.
Okazaki, Kyutaro	(M)	Kanagawa	3.
Okishima, Kenzo	(I)	Shimane	2.
Okumura, Senzo	(M)	Gifu	2.
Okuyama, Kamezo	(M)	Yamagata	2.
Onimaru, Yoshinari	(M)	Aichi	1.
Onishi, Masamiki	(M)	Kochi	2.
Ono, Keikichi	(M)	Hyogo	4.
Ono, Shigeyuki	(M)	Kanagawa	2.
Ono, Torakichi	(M)	Ehime	2.
Onodera, Akira	(S)	Iwate	2.
Osaki, Seisaku	(S)	Yamanashi	
Osanai, Noriaki	(M)	Aomori	2.
Osato, Hirojiro	(M)	Fukuoka	2.
Osawa, Torajiro	(S)	Saitama	2.
Ota, Shinjiro	(M)	Tokyo city	
Otake, Kan-ichi	(K)	Niigata	3.
Ouchi, Yozo	(I)	Fukuoka	3.
Ozaki, Yukio	(K)	Miye	2.
Sadatsuka, Monjiro	(M)	Saitama	1.
Saito, Iwao	(S)	Nagasaki	2.
Saito, Taihei	(M)	Tochigi	1.
Saito, Takao	(M)	Hyogo	5.

Saito, Tashiro	(S)	Tochigi	1.
Sakai, Daisuke	(S)	Fukuoka	4.
Sakakida, Seibel	(M)	Akita	2.
Sakamoto, Ikkaku	(S)	Tokyo	7.
Sakamoto, Shiro	(S)	Kochi	2.
Sakiyama, Takeo	(M)	Kagoshima	2.
Sakurai, Heigoro	(M)	Ishikawa	2.
Sakurauchi, Tatsuro	(M)	Tokyo city	
Sakurauchi, Yukio	(M)	Shimane	1.
Sakurai, Gunnosuke	(M)	Iwate	2.
Sakuta, Kotaro	(M)	Hiroshima	3.
Sasaki, Choji	(S)	Ehime	3.
Sasaki, Heiji	(S)	Hokkaido	3.
Sasaki, Kyuji	(S)	Fukui	
Satake, Naotaro	(S)	Gifu	2.
Satake, Shoshichi	(M)	Osaka	5.
Sato, Kei	(M)	Yamagata	1.
Sato, Minoru	(M)	Ishikawa	2.
Sato, Tadashi	(M)	Tokyo	6.
Sato, Yasunosuke	(S)	Tokyo	5.
Sato, Yoichi	(M)	Niigata	2.
Sawamoto, Yoichi	(M)	Yamaguchi	1.
Segawa, Mitsuyuki	(M)	Tokyo city	
Shiba, Teikichi	(M)	Tokyo	5.
Shiba, Yasuichiro	(M)	Nagasaki	1.
Shiga, Watari	(S)	Iwate	2.
Shigematsu, Juji	(M)	Oita	2.
Shilo, Bensho	(I)	Aichi	1.
Shimada, Toshio	(S)	Shimane	2.
Shimai, Tetsu	(S)	Hiroshima	3.
Shimizu, Ginzo	(S)	Shiga	
Shimizu, Tokutaro	(M)	Yamagata	2.
Shimizu, Tomesaburo	(M)	Gumma	1.
Shimomoto, Shikanosuke	(M)	Kochi	2.
Shimura, Seimon	(M)	Chiba	1.
Shinohara, Waichi	(S)	Nagano	2.
Sho, Shintaro	(S)	Yamaguchi	1.
Shoji, Yoshiro	(S)	Shizuoka	2.
Soeda, Keiichiro	(M)	Fukui	
Suematsu, Kaichiro	(M)	Fukuoka	4.
Sugamura, Taiji	(M)	Fukushima	3.
Sugano, Zen-emon	(S)	Fukushima	1.
Sugawara, Den	(S)	Miyagi	1.
Sugawara, Eiigo	(M)	Miyagi	2.
Suglura, Takeo	(M)	Aichi	5.
Sunada, Shigemasa	(S)	Kobe city	
Sunouchi, Shinakichi	(S)	Ehime	1.
Suzuki, Bunji	(P)	Osaka city	
Suzuki, Fujiya	(M)	Tokyo	5.
Suzuki, Goroku	(S)	Aichi	5.
Suzuki, Hideo	(S)	Kanagawa	3.
Suzuki, Iwao	(S)	Iwate	1.
Suzuki, Kentaro	(M)	Miyagi	
Suzuki, Kichinosuke	(S)	Kyoto city	
Suzuki, Takashi	(M)	Tokyo	6

Suzuki, Yasutaka	(S)	Akita	1.
Tabuchi, Toyokichi	(I)	Wakayama	2.
Tachikawa, Taro	(S)	Tokyo city	
Tada, Isawo	(S)	Fukuoka	1.
Tago, Kazutami	(S)	Iwate	1.
Tainaka, Kusuemon	(S)	Kanagawa	3.
Takagi, Masatoshi	(M)	Tokyo	5.
Takagi, Masutaro	(M)	Tokyo city	
Takahashi, Kinjiro	(S)	Niigata	3.
Takahashi, Kumajiro	(S)	Yamagata	1.
Takahashi, Mitsutake	(S)	Niigata	2.
Takahashi, Morihei	(M)	Saitama	2.
Takahashi, Motoshiro	(M)	Tochigi	1.
Takashima, Heikichi	(M)	Tokushima	2.
Takata, Umpei	(M)	Tochigi	1.
Takatori, Junsaku	(M)	Niigata	4.
Takatsu, Nakajiro	(S)	Gumma	2.
Takayama, Nagayuki	(S)	Ehime	1.
Takeda, Tokusaburo	(S)	Niigata	4.
Takeshita, Fumitaka	(S)	Okinawa	
Taketomi, Sai	(M)	Aichi	3.
Takeuchi, Hokichi	(S)	Ehime	2.
Takeuchi, Sakuhel	(M)	Osaka city	
Takeuchi, Tomojiro	(S)	Yamanashi	
Taki, Masao	(M)	Aichi	3.
Tamano, Tomoyoshi	(S)	Okayama	1.
Tanabe, Hichiroku	(S)	Yamanashi	
Tanabe, Kumachi	(S)	Niigata	1.
Tanaka, Chiyomatsu	(M)	Saitama	1.
Tanaka, Man-itsu	(M)	Osaka	5.
Tanaka, Ryoichi	(S)	Saga	1.
Tanaka, Ryuzo	(M)	Akita	1.
Tanaka, Yotatsu	(M)	Shiga	
Tanaka, Zenryu	(M)	Aichi	1.
Tange, Mojuro	(S)	Aichi	2.
Taniguchi, Genjuro	(M)	Tottori	
Tanomogi, Keikichi	(M)	Tokyo city	
Tawara, Magolchi	(M)	Shimane	2.
Tazaki, Nobuzo	(K)	Kyoto city	
Terada, Ichimasa	(M)	Kagoshima	2.
Terashima, Kenzo	(M)	Toyama	1.
Toda, Yoshimi	(M)	Nagano	3.
Togo, Minoru	(M)	Kagoshima	2.
Toi, Kasaku	(M)	Yokohama city	
Tokonami, Takejiro	(M)	Kagoshima	1.
Tomita, Hachiro	(S)	Shiga	
Tomita, Kojiro	(M)	Kochi	1.
Toyoda, Osamu	(S)	Tottori	
Tozawa, Tamijuro	(M)	Kagawa	1.
Tsuchiya, Seizaburo	(M)	Chiba	3.
Tsukumo, Kunitoshi	(S)	Tokyo	7.
Tsurumi, Yusuke	(I)	Okayama	1.
Tsuruoka, Kazufumi	(M)	Tokyo	6.
Tsutsumi, Seiroku	(I)	Niigata	3.
Tsutsumi, Yasujiro	(M)	Shiga	

Tsuzaki, Naotake	(M)	Kagoshima	3.
Uchida, Nobuya	(S)	Ibaraki	1.
Uchigasaki, Sakusaburo	(M)	Miyagi	1.
Uchino, Tatsujiro	(S)	Fukuoka	4.
Uehara, Etsujiro	(S)	Fukuoka	4.
Unno, Kazuma	(M)	Shizuoka	1.
Usuda, Kyunai	(M)	Fukuoka	3.
Uzawa, Uhachi	(M)	Chiba	2.
Wakamiya, Sadao	(S)	Hyogo	5.
Watanabe, Tokusuke	(M)	Gifu	3.
Yagi, Ichiro	(M)	Nara	
Yamabe, Tsuneshige	(M)	Nagano	2.
Yamada, Kiichi	(M)	Toyama	2.
Yamada, Mataji	(M)	Niigata	3.
Yamada, Michie	(M)	Gifu	1.
Yamaguchi, Chugoro	(S)	Shizuoka	
Yamaguchi, Gichi	(S)	Osaka	6.
Yamaguchi, Tsunetaro	(S)	Fukuoka	1.
Yamaji, Joichi	(M)	Hiroshima	2.
Yamamoto, Jotaro	(S)	Fukui	
Yamamoto, Kozo	(M)	Hokkaido	1.
Yamamoto, Senji	(P)	Kyoto	2.
Yamamoto, Shimpel	(S)	Nagano	1.
Yamamoto, Tadaji	(S)	Hyogo	3.
Yamamoto, Teijiro	(S)	Niigata	1.
Yamamura, Tasaburo	(I)	Hyogo	2.
Yamasaki, Dennosuke	(M)	Wakayama	
Yamasaki, Nobukichi	(I)	Aichi	3.
Yamasaki, Takeshi	(S)	Ibaraki	2.
Yamasaki, Tatsunosuke	(S)	Fukuoka	3.
Yamashita, Taniji	(S)	Kagawa	2.
Yamoto, Heinosuke	(M)	Miyagi	2.
Yano, Genkichi	(S)	Tokyo city	
Yano, Rikiji	(S)	Miyazaki	
Yano, Shinya	(S)	Tottori	
Yasuhara, Nihei	(M)	Gifu	1.
Yokobori, Jisaburo	(S)	Chiba	3.
Yokoyama, Katsutaro	(M)	Tokyo city	
Yokoyama, Kentaro	(M)	Hiroshima	3.
Yokoyama, Taizo	(S)	Okayama	1.
Yoshida, Isokichi	(M)	Fukuoka	2.
Yoshikawa, Kichirobei	(M)	Osaka city	
Yoshiki, Yo	(S)	Yamaguchi	2.
Yoshimura, Isaku	(S)	Kyoto	2.
Yoshiuye, Shoichiro	(S)	Chiba	2.
Yoshizu, Hakaru	(S)	Osaka city	

IV. LOCAL GOVERNMENT

Japan proper is divided into 46 administrative districts or prefectures. Three of them are called "fu," and the rest, "ken." Besides, there is a territory known as Hokkaido which covers an extensive region not yet classified into "ken," though for purposes of administration, the territory does not much differ from

"ken." Formosa, Korea, Saghalien, and the Kwantung Province are of course left out here. Formosa and Korea are still under the semi-military control of Governor-Generals; Saghalien is in charge of a civil governor specially appointed; while Kwantung is a Japanese suzerainty.

These 46 prefectures are subdivided into 636 smaller administrative districts, which are called "gun" or counties, and these in turn are subdivided into villages or "mura" and towns or "machi." There are 10,494 villages and 1,485 towns. Besides there are also 101 cities or "shi," which are autonomous.

The chief administrator of a "fu" or "ken" is called "chiji" or prefectural governor. All the prefectural governors are appointed by the Minister of the Interior, so that they are essentially bureaucrats pure and simple, whereas the mayor of a city or the headman of a town or village is elected by indirect popular votes usually for the term of four years. Thus when we say local government, the term includes all these different administrative organs, the chief executives of which are prefectural governor, mayor, and headman.

The Prefecture

Each prefecture has its own prefectural assembly, which is composed of at least 30 members elected by popular votes. Every male Japanese subject of the age of over 25 years, residing over one year in the prefecture and enjoying citizenship, has the right to vote or to be elected. The term of office of the members is four years. The assembly is called once a year by the prefectural governor to deliberate and decide the annual budget of the prefecture, and to give its consent to the general policies of the Governor. The assembly has no initiative, and it is, strictly speaking, only the advisory body of the Governor. None the less it is a representative institution, and, as a matter of fact, it is in Japan the oldest representative institution established after the Western model. It was originally established in 1878 with a view to prepare the people for a constitutional system of Government, which was then expected to be established in the near future. However the original law by which a prefectural assembly was first established, has been subjected to revision many times, and the last revision was made in 1926, when the tax qualification for voters and assembly members was abolished though under former system they were required to be payers of national direct tax of whatever amount.

The prefectural government with its own prefectural assembly is sometimes said to be a self-government body, but this is not correct in the strict sense of the term. First, the Governor himself is not an elected official, while the assembly is purely an advisory body having no initiative in all matters of the prefecture. The Government of Hokkaido having its own assembly is very much like a prefectural government. The reason that Hokkaido is not yet made a prefecture is that it is a newly colonised territory and hence is not so densely populated as the main land.

The County or "Gun"

In accordance with a decision passed in the 49th session of the Imperial Diet to abolish the "gun" system as sub-prefec-

tural administrative organs in view of the development of the means of communication and their diminished importance in the local executive machinery, these subordinate offices, 635 in all, ceased to exist in July 1926. For administrative convenience 25 branch offices of prefectural governments were established throughout the country, and the duty hitherto undertaken by the county-magistrates has been divided and shifted to prefectural functionaries and town or village headmen.

The City

A city with population of over 30,000 has a municipal government. The mayor of a municipal city is elected by its city-council, which is composed of at least 30 members elected by the qualified voters. Hence a city-government in Japan is in a sense a self-government, though the power of the mayor and city-council is still very much limited. A municipality can own and control all electric, gas, and water plants, and sewer systems; and it manages all matters concerning the primary education of its citizens, and its sanitary affairs. Within the limit defined by law, a municipality can make its own regulations and can tax its citizens. It can also make contract of loans. But all the power the mayor and the city-council of a city can exercise is under the strict supervision of the central as well as the prefectural government. No municipality in Japan is given the power to control the police forces within its city-limits, and even in Tokyo they are subsidiary to the Home Office.

Members of the city-council are elected by qualified voters, the qualifications of an elector being that he must be a Japanese subject of over 25 years old, residing over 2 years in his municipal electoral district.

Municipal System

The municipal system in force was revised in 1921, together with partial reform in the law for the control of the election of the members of the city council and again in 1926. By the revision the scope of franchise was considerably enlarged, this being intended as a preparatory step for the enforcement of general manhood suffrage for the election of parliamentary members. Under the revised law the electors are required to be Japanese subjects of over 20 years of age, residing in their municipal electoral districts for a period of over one year. The former system limited the voters to those living by their own independent means and paying direct municipal tax of whatever amount, but this qualification was abolished in 1926. The extension of franchise through the revision in 1921 has resulted in a remarkable increase in the number of voters, which compared with the figures under the former system showed an increase of about 204 per cent., the numbers swelling to 80 voters for a population of 1000 against 25 voters for a population of the same number under the old rules.

The result of the elections held under the system as revised in 1921 indicates a decided improvement in the quality of the members returned, particularly in respect of age, education, etc., as may be seen from the returns compiled by the Home Department

on the basis of the results of elections in 41 cities including Tokyo:

Under	No. of Candidates returned	Age			Education	
		Under 30	30 to 60	Over 60	Graduates of Middle and Higher Schools	Others
New System (1921) ..	1,398	18	1,257	122	764	634
Old System	1,250	7	1,101	143	681	569

Again, under the revised election system, the number of re-elected members considerably decreased as compared with the previous returns, while the number of members returned, who pay a comparatively small amount of tax, increased by about 206 per cent. The cases of absentees which under the former system averaged 253 per 1000 electors decreased to 176, showing a falling-off of 77, while the number of void votes stood at 9/1000 of the total number of votes, as against 8/1000 of the previous returns.

Lastly, classified according to occupations, those engaged in manufacturing and other industries, miscellaneous lines of business and those practising medicine or law considerably increased, while merchants, agriculturists, bankers and other business men decreased, the decline being especially notable in the case of those engaged in mercantile business.

The Town and the Village

The town and the village have also their own self-government, somewhat similar to the municipal government, but on a smaller scale. They have their own headmen elected by indirect popular votes, i.e. a headman elected by the town council in the case of a town, and by the village council in the case of a village. The qualifications of an elector of the town or village council are practically the same as those of an elector of the municipal council.

The first elections of the members of the city, town and village councils throughout the country, under the new election system as revised in 1923, were concluded in September, 1925.

According to the reports from the prefectural authorities obtained so far, more noteworthy features of the election results are the increase of candidates, the change in the mode of election campaigns and the greater activity shown by the *Suiheisha* (Equality Society) elements and various labor bodies. Formerly most of the candidates were elderly and wealthy men or otherwise influential men of the localities, but in the elections under the new system, many youthful and less influential men who are not rich ran for election. The result was many representatives of the farmers' associations, the *Suiheisha* and the labor organizations and men of the so-called *intelligentia* (bourgeois class) were returned in various prefectures. A significant change noted in the mode of election campaign generally was that speech-making was very extensively resorted to as in the case of parliamentary members, this phenomenon attesting to the gradual growth in oratorical and literary attainment.

Latest Revision of Local System

In 1926 an epoch-making revision in the history of local administrative system in this country was effected for the municipal, town and village systems. The abolition of qualification about tax and self-supporting means of livelihood is the principal feature of the revision, this resulting in the extension of franchise. In the new system, all native male subjects of over 25 years of age, who have resided in the same cities, towns or villages for two years and over are eligible as voters for or members of municipal, town or village assemblies as the case may be. At the same time, the class distinction of electors and candidates has been abolished, their qualifications being made uniform to that of parliamentary election. This means the adoption of the principle of the new election law for parliamentary members to the election of the members of assemblies. The new local election law has been adopted as a preparatory step towards the enforcement of the new parliamentary election law (general manhood franchise measure) taking effect from the next general election 1928. The prefectural system has received a similar revision to the municipal system, the division of constituencies in the former system being abolished. In this respect Hokkaido has been brought into the same line with the rest of Japan proper. The first election under the new system were held at Hamamatsu, Sapporo, Asahikawa, Muroran and a few other cities so far and the returns show that democratic tendency is pushing to the front with greater power.

First Election under the Universal Suffrage System

The first elections of prefectural assemblies members under the universal suffrage system came off in the fall of 1927 in 39 prefectures (in Hokkaido, Tokyo, Kanagawa, Saitama, Chiba, Saga, Okinawa and Shimane prefectures elections are to take place in 1928 and 1929).

The number of voters for the 39 prefectures was 9,152,638 (more than two times the figure of the previous occasion), the members to be elected totalled 1,489, an increase of 39 over the previous figure, while the candidates reached over 2,000, including over 200 proletarians.

The relative strength of various parties before and after the elections, and polling returns stand as follows:

	Before the Election	After the Election	Votes Polled
Seiyukai (Ministerial)	728	716	2,713,742
Minseitō (Opposition)	529	577	2,395,502
Kakushin Club	9	7	33,974
Jitsugyo Doshikai	2	5	20,184
Proletarian parties	1	24	253,050
Independents	136	156	688,151

Some members of the independent group are expected to make common cause with the Seiyukai or with the Opposition. The figure for the proletarian parties is made up as follows:—

Japan Farmers Party 4; Japan Labor Party 3; Labor and Farmers Party 13; Social Democratic Party 4; Local proletarian parties 4. The absentees numbered 2,318,247 or 26.5% of the total number of electors.

Composition of Prefectures

Prefecture	"Gun"	City	Town	Village	Prefecture	"Gun"	City	Town	Village
Aichi	18	4	74	170	Miye	15	3	27	308
Akita	9	1	45	193	Nagano	16	3	28	357
Aomori	8	2	20	148	Nagasaki ...	9	2	11	181
Chiba	12	1	78	270	Nara	10	1	22	131
Ehime	12	3	32	253	Niigata	16	3	45	365
Fukui	11	1	10	163	Osaka	13	2	33	224
Fukuoka ...	19	8	51	279	Okayama ...	19	1	52	345
Fukushima .	17	3	43	366	Okinawa ...	5	2	1	52
Gifu	18	2	50	293	Osaka	9	4	34	295
Gumma	11	3	38	168	Saga	8	1	12	120
Hiroshima ..	16	4	53	375	Saitama	9	1	43	326
Hokkaido ...	86	6	40	198	Shiga	12	1	20	182
Hyogo	25	4	46	375	Shimane	16	1	18	264
Ibaraki	14	1	47	333	Shizuoka ...	13	4	42	288
Ishikawa ...	8	1	22	198	Tochigi	8	2	36	139
Iwate	13	1	23	213	Tokushima .	10	1	31	108
Kagawa	7	2	20	154	Tokyo	8	2	47	145
Kagoshima .	12	1	16	128	Tottori	6	1	14	174
Kanagawa ..	11	3	24	169	Toyama	8	2	32	236
Kochi	7	1	23	172	Wakayama .	7	1	27	201
Kumamoto .	12	1	40	309	Yamagata ..	11	3	24	202
Kyoto	18	1	26	242	Yamaguchi .	11	2	28	192
Miyagi	16	1	38	166	Yamanashi .	9	1	7	234
Miyazaki ...	8	2	15	81	Total	636	101	1,510	10,454

Note—For area, population, etc. see Chapter on Population.

As regards the composition, finance, etc., vide Chapters on Population and also on the Six Premier Cities.

Members of Local Assemblies

	Prefectural		County		Municipal		Town and Village	
	Mem.	Elec. (1,000)	Mem.	Elec. (1,000)	Mem.	Elec. (1,000)	Mem.	Elec. (1,000)
1915	1,702	2,381	12,789	2,266	2,220	298	151,059	4,277
1918	1,737	2,409	13,048	2,310	2,475	293	151,793	4,367
1920	1,737	2,410	13,048	2,310	2,505	300	153,191	4,409
1921	—	—	—	—	3,045	465	155,348	5,010
1922	—	—	—	—	3,173	695	154,779	5,206
1923	1,734	4,911	—	—	3,216	745	155,245	5,309
1924	1,734	4,977	—	—	3,462	867	154,706	5,834
1925	—	—	—	—	3,536	1,207	153,035	6,482
1926	—	—	—	—	3,553	1,346	152,539	6,200

N.B.—The county assembly system was abolished in 1920, prior to the abolition of "gun" or county offices as local administrative organs in 1926.

Strength of Different Political Parties
in Local Assemblies

The strength of different political parties in local assemblies as obtained in July, 1927, is shown below:—

	Fixed No. of members	Minseitō				Other Parties				Vacancies
		Kenseikai	Saiyū Hontō	Other	Total	Saiyūkai	Former Kakushin	Jitsugyō Dōshikai	Neutral	
Total	789	512	264	36	839	774	13	15	140	9

Mr. Tokonami, who led the Saiyū Hontō contingent of the Minseitō, broke away on Aug. 1 to form a "third" party which, however, has not yet taken a definite shape, so that the relative position of party following in the provinces has become very much dislocated. It will take some time before it settles down.

CHAPTER VII

CIVIL AND MILITARY SERVICE

CLASSIFICATION

The civil service is divided into four classes, viz. "Shin-nin," "Choku-nin," "So-nin" and "Han-nin." The "Shin-nin" comprises Cabinet Ministers, Privy Councillors, Ambassadors and a few others, all being nominated by the Emperor in person. They are entitled to report direct to the Crown. The President and Procurator-Gen. of the Court of Cassation, Chief of the Board of Audit, Lord Steward to the Empress, President of the Administrative Litigation Court, and a few others also enjoy treatment of the supreme grade. The "Choku-nin" officials are appointed by the Emperor through the respective Departmental Chiefs and are entitled to attend State ceremonies. Vice-Ministers and Bureau Directors of Departments, Provincial Governors, University Professors of high grade and some others belong to this category. The "So-nin" officials are not entitled to attend State ceremonies. The second and the third are also collectively designated as "Koto-kan" (high official). The fourth class comprises clerks, assistant-engineers and others of similar rank.

Appointment

The Appointment Regulations as amended in Oct. 1914, have become more liberal in spirit than before and are also calculated to minimize the evil of dislocation of official business incidental to Cabinet changes. The Special Appointment now covers the Chief Secretary of Cabinet, Director of Legislative Bureau, Inspector-Gen. of the Metropolitan Police, Director of the Police Bureau, Chief Secretaries of the Houses of the Diet and Personal Secretaries to Ministers of State, Parliamentary Vice-Ministers and Counsellors.

The total force at the end of 1925:

Civil officials,—“Choku-nin”, 1,124; “So-nin”, 12,030; “Han-nin”, 131,494; Employees, 193,850; Total 338,498.

Military officers.—“Shin-nin” and “Choku-nin”, Army, 236, Navy, 119; “So-nin”, A. 14,094, N. 4,593; “Han-nin”, A. 3,698, N. 17,811; Cadets, N. 326; Total, A. 18,023, N. 23,885; Grand total 41,908. (Figures for 1924.)

Scale of Salaries

The scale of salaries for the Government officials of all ranks except the Premier, the Ministers of State, the Governor-Generals of Korea and Formosa and Governor of Kwantung Province, were substantially increased in 1920 and put in force from August of that year. With the enforcement of the new scale the

special allowances which had been granted since 1919 in view of marked rise in the cost of living were withdrawn. The new scale stands as follows for principal posts in civil and military service.

“Shin-nin” Rank

Duty	Per annum
Prime Minister	¥12,000
Minister of State.....	8,000
— Gov.-General of Korea.....	8,000
President of Privy Council.....	7,500
Governor of Kwantung.....	7,500
— Gov.-General of Formosa.....	7,500
Ambassador	7,500
President, Administrative Litigation Court.....	7,500
President of the Board of Audit.....	7,500
Judges & Procurators.....	7,500
Vice-President of Privy Council.....	7,000
— Director-General, Administrative Affairs, Korea...	7,000
Privy Councillor	6,500

“Choku-nin” Rank

Presidents of Imp. Universities.....	7,000-6,500
President of Govt. Iron Foundry.....	7,000-6,500
Governor of Hokkaido.....	7,000-6,500
Chief Secretary of Cabinet.....	6,500
Chief of Legislative Bureau.....	6,500
Chief of Reconstruction Bureau.....	6,500
Vice-Minister, Parliamentary & Permanent.....	6,500
— Director-General, Civil Affairs, Formosa.....	6,500
Inspector-General of the Metropolitan Police.....	6,500
President of Board of Decoration.....	5,700
Chief Secretary of Privy Council.....	5,700
Bureau Director	5,200
Chief Sec., Houses of Diet.....	5,200-5,700
Local Governor	5,200-6,000

(Governors of Tokyo, Osaka, Kyoto, Kanagawa, and Hyogo enjoy additional allowance of ¥800; and those of Nagasaki, Niigata, Aichi, Miyagi, Hiroshima, Fukuoka, and Kumamoto, ¥600).

The new scale for officials of “So-nin” and “Han-nin” ranks is given in the following table:—

		So-nin (Annual)	Han-nin (Monthly)			So-nin (Annual)	Han-nin (Monthly)
		¥	¥			¥	¥
1st class.....		4,500	160	7th class.....		2,400	65
2nd „		4,100	135	8th „		2,000	55
3rd „		3,800	115	9th „		1,800	50
4th „		3,400	100	10th „		1,600	45
5th „		3,100	85	11th „		1,400	40
6th „		2,700	75	12th „		1,200	—

Note:—In exceptional cases the salary of “Han-nin” rank may be raised to the limit of ¥200 a month.

Diplomatic and Consular Service

	Salary	Allowance
	¥	¥
Ambassador.....	7,500	45,000 (U. S. A.) 40,000 (Great Britain and France) 35,000 (Germany) 30,000 (Russia, Italy, Brazil and Turkey) 28,000 (Belgium) 26,000 (China)
Min. Ple. & En. Ex..	{ 6,500 { 5,700 { 5,200	{ 22,000 (Other European countries) { 25,000 (Austria and Argentine) { 18,000 (Mexico, Chile and Peru) { 15,000 (Siam)
Counsellor.....	{ 6,500 { 5,200	16,000—9,000
Consul-General.....	5,200	{ 15,000 (New York)—12,000 (London) { 6,000 (in some Chinese cities)
Consul.....	{ 4,500 { 3,800	{ 9,000 (Havana)—8,500 (Seattle, Chicago, etc.) { 8,000 (Marseilles, Panama, etc.) { 4,000 (in some Chinese cities)
Vice-Consul.....	{ 3,400 { 3,100	

Officials of the Imperial Household

	Salary
	¥
Minister	8,000
Grand Chamberlain	7,000
Lord Keeper of the Privy Seals ("Shin-nin").....	8,000
Vice-Minister	6,500
Lord Steward to Empress.....	6,500-5,700
Grand Master of Ceremonies ("Shin-nin").....	7,000-6,500
Director of Imp. Estate Bureau.....	6,500-5,200
Director of Peerage Bureau (accorded treatment of "Shin-nin" rank)	7,500-6,500

Officials of the higher civil service draw from ¥4,500 to 900 a year.

The Court of Cassation

	Salary per annum
	¥
President	7,500
Procurator-General	7,500
Judges and Procurator.....	6,500-4,500

Appeal Courts

	Salary per annum
	¥
Presidents	6,500-5,200
Chief Procurators	6,500-5,200
Judges & Procurators.....	5,200-4,500

District Courts

Salary per annum

Presiding Judges & Chief Procurators..... 5,200-4,500

Military Officers		Naval Officers	
	¥		¥
General	7,500	Admiral	7,500
Lieut.-General	6,500	Vice-Admiral	6,500
Major-General	5,600	Rear-Admiral	5,600
Colonel	4,600	Captain	4,600
Lieut.-Colonel	3,600	Commander	3,600
Major	2,600	Lieut.-Commander	2,600
Captain	2,100-1,600	Lieutenant	2,290-1,600
Lieutenant	1,200-1,020	Sub-Lieutenant (1st)	1,910-1,020
Sub.-Lieutenant	850	Sub-Lieutenant (2nd)	1,600-850
Non-commissioned and petty officers	2,400-800	Midshipman (cadets)....	670
		Non-commissioned officers	1,260-930

PENSIONS AND ANNUITIES

Pensions to civil and military officers, annuities to their families, and lump sum of money granted on their retiring, or, in case of death, to their families, make the following record (in Yen). Annuities attached to the decorations are also added.

Civil Service

Year ended Dec. 31	Pension		Annuity to family		Retiring grant	
	No. of recipients	Total amount	No. of recipients	Total amount	No. of recipients	Total amount
1925 ...	50,703	28,209,419	18,857	5,020,753	—	—
1926 ...	52,716	29,731,432	20,289	5,439,093	—	—

Military Service

Year ended Dec. 31	Pension		Annuity to family		Retiring grant	
	No. of recipients	Total amount	No. of recipients	Total amount	No. of recipients	Total amount
1925 ...	113,194	46,061,443	85,926	16,460,887	—	—
1926 ...	114,080	47,226,308	86,085	16,574,590	—	—

Naval Service

Year ended Dec. 31	Pension		Annuity to family		Retiring grant	
	No. of recipients	Total amount	No. of recipients	Total amount	No. of recipients	Total amount
1925 ...	53,731	19,848,147	12,574	3,002,717	—	—
1926 ...	56,237	20,762,058	13,313	3,189,756	—	—

Annuity attached to the Orders of Golden Kite (Army & Navy Honor) and Rising Sun

	Golden Kite		Rising Sun	
	No. of recipients	Total amount	No. of recipients	Total amount
1925	66,540	8,801,300	4,172	211,042
1926	65,659	8,664,000	4,012	199,852

Note.—Also see "Decoration," Chapter on Imperial Court, etc.

THE REVISED PENSION SYSTEM

With the approval of the 46th session of the Diet, the Government enforced in April, 1923, the revised Pension Law to re-

place the old Military and Civil Pension Laws and other regulations and ordinances relating to pensions, retiring allowances etc. These laws and regulations had frequently received revisions and additions and hence are much complicated, while the rate of annuities and grants provided therein had become inadequate to meet the changed social conditions. The new enactment unified the system and also effected increase in rate from $\frac{1}{4}$ to $\frac{1}{3}$ of the salary for civil pension and advance of 30 per cent. for military pension.

Below is given an outline of the new system.

Kinds of Pensions

Pensions are divided into (a) ordinary pension, (b) additional pension, (c) retiring allowance, (d) invalid allowance, (e) pension to families of deceased officials and officers, and (f) allowance to families of deceased officials and officers.

Those who are entitled to pension under the law are civil officials above "han-nin" rank and military officers and men. The staff of public schools and libraries, prison and police officers (all above "han-nin" rank) are entitled to the same privileges as civil officials.

Civil officials and staff of public schools and libraries are under obligation to pay every month into the national treasury a sum equivalent to 1 per cent. of their monthly salary.

The right to pension ends with the death of the claimants, or when he commits felony or loses nationality, while the right is suspended when he re-enters the State Service as officer above the rank occupied before, or when he is deprived of public civil rights.

Ordinary Pension

Civil officials who retire after a series of 15 years or more (10 years in the case of police and prison officers) are entitled to ordinary pension, the amount being fixed according to the length of service and the salary drawn at the time of retirement. The rate is 50/150 of the annual sum for one whose service extended 15-16 years, $\frac{1}{150}$ to be added for each extra year until the maximum of 40 years is reached.

Military officers and men are granted ordinary pension on retiring after the service of 11 years or more. For each extra years (until the maximum of 50 years is reached) an addition is allowed as shown in the undermentioned scale of rate fixed according to the rank.

Length of service	Generals & admirals	Colonels, captains to lieutenants	Non-commissioned & warrant officers	Privates
11	¥2,500—1,867	¥1,534—467	¥400—225	¥200—150
15	2,700—1,017	1,656—505	432—253	224—174
20	2,950—2,204	1,808—552	472—288	254—204
25	3,200—2,392	1,961—600	512—323	284—234
30	3,450—2,579	2,113—647	552—358	314—264
35	3,700—2,767	2,266—695	592—393	344—294
40	3,950—2,954	2,418—742	632—428	374—334
45	4,200—3,142	2,571—790	673—463	404—354
50	4,450—3,329	2,703—837	712—498	434—384

Additional Pension and Invalid Allowance

Civil officials and military officers and men who have retired on account of incapacity arising from ill health or wounds while in discharge of duty are granted additional pension according to the following scale:—

A. Disabled in Action

Degree of incapacity	Officials of shinin & chokunin rank, generals & admirals	Officials of sonin rank, colonels, captains to lieutenants	Officials of hanjin rank non-commissioned & warrant officers & privates
Special*	—	—	—
1st	¥2,400	¥1,800—1,200	¥1,080—900
2nd	2,000	1,500—1,000	900—750
3rd	1,600	1,200—800	720—600
4th	1,280	960—640	576—480
5th	1,000	750—500	450—375
6th	800	600—400	360—300

B. Disabled while on Ordinary Duty

Degree of incapacity	Officials of shinin & chokunin rank, generals and admirals	Officials of sonin rank, colonels, captains to lieutenants	Officials of hanjin rank non-commissioned and warrant officers and privates
Special*	—	—	—
1st	¥1,920	¥1,440—960	¥864—720
2nd	1,600	1,200—800	720—600
3rd	1,280	960—640	576—480
4th	1,034	768—512	461—384
5th	800	600—400	360—300
6th	640	480—320	288—240

N.B.—* Sum of the 1st degree plus 5/10 or below of the sum.

Invalid allowance is granted to military men below rank of non-commissioned and warrant officers who have retired on account of ill health or wounds suffered while on duty, though not disabled for life. The rate of this allowance is as follows:—

A. Invalid from action

Degree	Rate	Degree	Rate
1st	¥1,650-1,500	6th	¥825-750
2nd	1,485-1,350	7th	660-600
3rd	1,320-1,200	8th	495-450
4th	1,155-1,050	9th	330-300
5th	950-900	10th	165-150

B. Invalid from discharge of duty

Degree	Rate	Degree	Rate
1st	¥1,320-1,200	6th	¥660-600
2nd	1,188-1,080	7th	528-480
3rd	1,056-960	8th	396-360
4th	924-840	9th	264-240
5th	792-720	10th	132-120

Retiring Allowance

Retiring allowance is granted to those who retire from the service before the tenure of service entitles them to pension, the sum being fixed as in the case of pension according to the length of service and the sum of salary drawn by the retiring official or officer at the time of retirement. For civil officials it is calculated by multiplying the sum of monthly salary by the number of years of service. For military officers the scale of rate is as shown in the following:—

Length of service	Generals and admirals	Colonels, captains to lieutenants	Non-commissioned & warrant officers
2	—	¥ 542—233	¥ 200—113
4	—	1,533—467	400—225
6	¥ 3,250—2,800	2,300—700	428—358
8	5,000—3,733	3,067—933	570—350
10	6,250—4,667	3,833—1,167	1,000—564

Pension and Allowance to Families of Deceased Officials and Officers

Pension is granted to the family of the deceased whose tenure of service entitles him to ordinary pension or who had already been receiving ordinary pension, the amount being (1) the whole sum of the pension to the deceased in the case of death from ill health or wounds suffered in action, (2) 8/10 in the case of death from ill health or wounds while on ordinary duty, and (3) 5/10 in the case of death from other causes.

Allowance is granted to the family of one who died in office before the tenure of service entitles him to pension, the amount being same as the retiring allowance for the corresponding length of service.

The order of family members entitled to this pension, or allowance is widow, children under age, widower, parents, and grandparents.

DIRECTORY

(July, 1928)

Cabinet. —Prime Minister	Gen. Baron G. Tanaka.
Chief Secretary	I. Hatoyama.
Director, Bureau of Statistics	Y. Gejo.
" " " Decoration	N. Amaoka.
" " " Pensions	Y. Gejo.
" " " Legislation	Y. Mayeda.
" " " Colonization	M. Naruge.
" " " National Resources	K. Usami.
" " " Printing Bureau	T. Sugi.
Privy Council. —President	Dr. Baron Y. Kuratomi.
Vice-President	Dr. Baron K. Hiranuma.
Chief Secretary	Dr. H. Futagami.

Councillors:

Count M. Ito.	Baron K. Furuichi.
Baron R. Kuki.	Dr. I. Matsumuro.
Viscount K. Kaneko.	S. Egi.
Baron Y. Kubota.	Count Y. Uchida.
Dr. Baron M. Tomii.	Baron Adm. R. Yashiro.
Marquis K. Inouye.	Dr. J. Sakurai.
Baron N. Hirayama.	Baron K. Den.
Viscount I. Ishiguro.	K. Arai.
Count S. Chinda.	Gen. M. Kawai.
Gen. Baron Y. Nakamura.	K. Isinawara.
Dr. Baron K. Yamakawa.	Viscount Adm. M. Saito.
Marquis N. Kuroda.	E. Kamada.

Imperial Household.—Minister	Dr. K. Ichimi.
Vice-Minister	T. Sekiya.
Grand Chamberlain	Count S. Chinda.
Deputy Grand Chamberlain	Viscount T. Iriye.
"	Y. Kawai.
Grand Master of Ceremonies	Prince H. Ito.
Deputy Grand Master of Ceremonies	N. Watanabe.
Grand Master of Rituals	Prince M. Kujo.
Lord Keeper of Privy Seal	Count N. Makino.
" Steward to the Empress	Y. Kawai.
Director, Treasury Bureau	T. Sugl.
" Archives Bureau	E. Sugl.
" Peerage Bureau	Viscount M. Sengoku.
" Medical Affairs Bureau	Dr. T. Sato.
" Culinary Affairs Bureau	S. Ueno.
" Imperial Tombs Bureau	E. Sugl.
" Architecture Bureau	Baron H. Higashikuze.
" Imperial Mews Bureau	H. Saionji.
Chief Aide-de-Camp to the Emperor	Gen. Baron T. Nara.
" Steward to the Empress Dowager	Viscount T. Irie.
" Auditor	K. Iriye.
" Forest Bureau	M. Sanya.
" Poetry Bureau	Viscount T. Iriye.
President of Peers' School	R. Fukuhara.
" Peeresses' School	T. Matsuura.
Foreign Affairs.—Minister	Baron G. Tanaka.
Parliamentary Vice-Minister	K. Mori.
Permanent Vice-Minister	K. Debuchi.
Parl. Counsellor	S. Uyehara.
Director, Bureau of Asiatic Affairs	H. Arita.
" Bureau of European and American Affairs	M. Hotta.
" Commercial Bureau	T. Taketomi.
" Treaty Bureau	N. Matsunaga.
" Intelligence Bureau	Marquis K. Komura.
Home Affairs.—Minister	K. Mochizuki.
Parliamentary Vice-Minister	K. Akita.
Permanent Vice-Minister	K. Ushio.
Parliamentary Counsellor	K. Kato.
Director, Shrine Bureau	S. Yoshida.
" Local Affairs Bureau	S. Sagami.
" Police Bureau	S. Yokoyama.
" Public Works Bureau	M. Miyazaki.
" Sanitary Bureau	J. Yamada.
" Social Affairs Bureau	R. Nagaoka.
" Reconstruction Bureau	Z. Horikiri.
Finance.—Minister	T. Mitsuchi.
Parliamentary Vice-Minister	Y. Oguchi.
Permanent Vice-Minister	H. Kuroda.
Parliamentary Counsellor	G. Yamaguchi.
Director, Account Bureau	R. Kawada.
" Taxation Bureau	N. Fujii.
" Finance Bureau	Y. Tomita.
" Banking Bureau	O. Matsumoto.
" State Property Adjustment Bureau	H. Kurota.
" Mint	S. Nagai.
" Monopoly Bureau	S. Imakita.

Chief of Customs House: Yokohama, T. Inouye; Kobe, K. Yasukura; Nagasaki, H. Kanemitsu; Moji, S. Izumi; Hakodate, K. Hirayama; Osaka, T. Nakajima.

(Army and Navy list given later.—Ed. J.Y.B.)

Justice.—Minister Dr. Y. Hara.
 Parliamentary Vice-Minister K. Hamada.
 Permanent Vice-Minister N. Kohara.
 Parliamentary Counsellor S. Isobe.
 Director, Prison Affairs Bureau..... K. Matsui.
 „ Criminal Affairs Bureau..... S. Motoji.
 „ Civil Affairs Bureau..... T. Ikeda.
 President, Supreme Court Dr. K. Makino.
 Procurator Gen., Supreme Court..... S. Koyama.
 Presidents, Appeal Courts:—S. Wani (Tokyo), S. Tanita (Osaka), K. Tachibashi (Nagoya), Y. Imamura (Hiroshima), Y. Nakanishi (Nagasaki), T. Ishii (Miyagi), K. Narita (Hakodate).
 Chief Procurators:—I. Miki (Tokyo), H. Otaguro (Osaka), K. Terajima (Nagoya), H. Minakawa (Hiroshima), T. Minamidani (Nagasaki), J. Mitsuyuki (Miyagi), S. Adachi (Hakodate).

Education.—Minister K. Shoda.
 Parliamentary Vice-Minister T. Yamazaki.
 Permanent Vice-Minister K. Awaya.
 Parliamentary Counsellor M. Ando.
 Director, Special School Affairs Bureau..... T. Sekiya
 „ Common School Affairs Bureau..... K. Takebe.
 „ Technical School Affairs Bureau..... (act.) N. Akama.
 „ Library Bureau T. Shibata.
 „ Religion Bureau J. Shimomura.
 President, Tokyo Imperial University..... Dr. Y. Kozai.
 Director, Astronomical Observatory..... K. Saotome.

N.B.—For the names of Presidents of other Universities and Directors of Colleges and Schools vid. Chap. on Education.

Commerce and Industry.—Minister T. Nakahashi.
 Parliamentary Vice-Minister S. Yoshiuye.
 Permanent Vice-Minister Baron T. Shijo.
 Parliamentary Counsellor R. Makino.
 Bureau Directors:—Commercial, S. Soejima; Industrial, S. Yoshino; Mining, Y. Mitsui.

Director, Patents Bureau..... S. Sakikawa.
 Chief, Government Iron Foundry..... R. Nakai.

Agriculture and Forestry.—Minister..... T. Yamamoto.
 Parliamentary Vice-Minister T. Higashi.
 Permanent Vice-Minister..... J. Abe.
 Parliamentary Counsellor S. Sunada.

Bureau Directors:—Agriculture, S. Matsumura; Sericulture, T. Ishiguro; Forestry, K. Iriye; Fishery, T. Nagase; Stock Breeding, Y. Toda.

Communications.—Minister F. Kuhara.
 Parliamentary Vice-Minister U. Hirooka.
 Permanent Vice-Minister T. Kuwayama.
 Parliamentary Counsellor T. Mukai.

Bureau Directors:—Postal Affairs, N. Yamamoto; Telegraph & Telephone Affairs, T. Hatakeyama; Electricity, N. Murai; Mercantile Marine, K. Miyazaki; Construction, S. Inada;

Aviation, T. Yanagiya; Financial, H. Ohashi; Postal Savings, A. Nozoe; Petty Insurance, R. Tanabe; Light House, Marquis T. Hirohata.

Divisional Superintendents:—Y. Hatano (Tokyo); S. Nomoto (Nagoya); Y. Hiratsuka (Osaka); E. Sonoda (Hiroshima); H. Asano (Kumamoto); N. Mayeda (Sendai); H. Ishino (Sapporo).

Railways.—Minister H. Ogawa.
Parliamentary Vice-Minister Y. Uyeno.
Permanent Vice-Minister Y. Hatta.
Parliamentary Counsellor W. Shiga.

Bureau Directors:—Traffic, M. Kakehi; Construction, K. Nakamura; Way & Works, M. Kagayama; Adm. of Private Railways, M. Fukutomi; Engineering, M. Akiyama; Financial R. Yatabe; Electric, M. Masunaga; Maintenance & Improvement, M. Kagayama.

Divisional Superintendents:—K. Kubota (Tokyo); T. Niwa (Nagoya); G. Murakami (Kobe); K. Yoshida (Mojii); K. Ito (Sendai); T. Kiga (Sapporo).

Government General of Chosen.—Gov.-Gen. Gen. H. Yamanashi.
Director-General, Administrative Affairs.....S. Ikegami.

Bureau Directors:—Home, S. Ikuta; Financial, H. Kusama; Industrial, T. Imamura; Judicial, T. Matsutera; Educational, Yi; Police, S. Asari; Railway, T. Omura; Communications, K. Kambara; Monopoly, R. Minakuchi; Director, Higher Court, G. Yokota; Director, Appeal Court, Baron J. Manabe; Customs Directors, H. Watanabe (Jinsen); M. Miyazaki (Fusan); K. Sawa (Shin-gishu).

Government General of Taiwan.—Gov.-Gen.... T. Kawamura.
Director-General, Civil Affairs..... K. Kawarada.

Bureau Directors:—Home, K. Toyoda; Finance, M. Tomita; Traffic, N. Kinoshita; Industrial, T. Uchida; Education, E. Ishiguro; Police, T. Okubo; Monopoly, T. Tsuneyoshi; Director, Appeal Court, Y. Aibara; Customs Director, I. Otake.

Government of Kwantung.—Civil Gov.....K. Kinoshita.
Directors, Foreign Affairs Section, H. Yamazaki; Bureau of Home Affairs, N. Hirose; Bureau of Police Affairs, T. Kubo; Bureau of Finance, S. Nishiyama; Dir. Appeal Court, N. Tsuchiya.

Chief, Civil Administration Office of Port Arthur T. Fujiwara.

" " " " " " Dairen S. Tanaka.

Government of Karafuto.—Governor..... K. Kita.
Bureau Directors:—Home, Z. Konishi; Police, T. Koyama; Agr. & For., S. Yokoo.

Board of Audit.—President.....Dr. K. Mizumachi.
Sectional ChiefsH. Kono, K. Oka, K. Imazumi.

Court of Administrative Litigation.—President S. Kubota.
Councillors: Dr. S. Shimizu, K. Sekiguchi, T. Miyake, T. Shimamura, E. Yadori, K. Fukuyama, T. Kanamori, Dr. G. Endo, K. Murakami, T. Sawada, F. Nozawa, S. Horie, T. Kimura, A. Shirokane, C. Tamai, B. Abe.

Metropolitan Police Board.—Inspector-General M. Miyata.

Imperial Diet (Vide Chap. Politics).

Army.—Minister Gen. Y. Shirakawa.
 Parliamentary Vice-Minister T. Takeuchi.
 Permanent Vice-Minister Lt.-Gen. N. Abe.
 Parliamentary Counsellor S. Hatta.
 Director, Personnel Bureau, Lt.-Gen. Y. Kawashima.
 „ Military Affairs Bureau.... Maj.-Gen. G. Sugiyama.
 „ Arms Bureau Maj.-Gen. A. Kishimoto.
 „ Finance Bureau..... Paym.-Gen. S. Mitsui.
 Director, Medical Affairs Bureau.. Surgeon-Gen. K. Yamada.
 „ Law Affairs Bureau..... Y. Nakayama.
 „ Adjustment Bureau Lt.-Gen. N. Matsuki.
 Chief of Aviation Dep't..... Lt.-Gen. I. Inouye.
 Director, Military Arsenal..... Lt.-Gen. K. Ogata.
 Director, Ordnance Dep't..... Maj.-Gen. F. Murase.
 „ Technical Dep't. Lt.-Gen. T. Yoshida.
 „ Scientific Investigation Dep't.. Lt.-Gen. N. Kurosaki.
 Chairman, Technical Council..... Lt.-Gen. E. Hata.
 Commander, Gendarmerie Headquarter Maj.-Gen. Y. Mine.
 „ „ „ of Chosen.. Maj.-Gen. M. Kusakabe.
 Chief, Fortification Dep't..... Maj.-Gen. S. Yamanouchi.
 „ Horse Administration Dep't... Maj.-Gen. K. Uyeda.
 „ Transport Dep't..... Lt.-Gen. K. Kihara.
 Director, Senju Woolen Factory Paym... Paym.-Col. K. Nagahiro.
 „ Provision Department..... Paym.-Col. K. Sato.
 „ Clothing Department..... Paym.-Col. M. Toyama.

General Staff Office.—Chief Gen. S. Suzuki.
 Vice-Chief Lt.-Gen. J. Minami.
 Sectional Chiefs, Lt.-Gen. R. Okamoto, (General Affairs), Lt.-
 Gen. I. Matsui, Maj.-Gens. J. Hirose, S. Hata, K. Hayashi.
 Director, Surveying Bureau..... Maj.-Gen. H. Omura.

Military Education Dep't.—Inspector-Gen... Gen. N. Muto.
 Chief, General Affairs..... Lt.-Gen. S. Kishimoto.
 Inspectors:—Cavalry, Major-Gen. H. Miyoshi; Artillery, Lieut.-
 Gen. M. Sakabe; Engineering, Lt.-Gen. Sato; Commis-
 sariat, Maj.-Gen. H. Hattori.

Director, Military Staff College..... Lt.-Gen. S. Araki.
 „ Art. and Eng. School..... Lt.-Gen. K. Ohashi.
 „ Toyama School Maj.-Gen. K. Kashii.
 „ Cavalry School Maj.-Gen. N. Matsuzaki.
 „ Field Artillery School..... Maj.-Gen. K. Muro.
 „ Heavy Artillery School..... Maj.-Gen. T. Inouye.
 „ Infantry School Lt.-Gen. T. Yamamoto.
 „ Engineering School Maj.-Gen. R. Kamimura.
 „ Cadets School Maj.-Gen. S. Hayashi.
 „ Surgeons School..... Surgeon-Gen. T. Aida.
 „ Veterinary Surgeon School Surg.-Gen. K. Okada.
 „ Motor Car School..... Maj.-Gen. T. Kasahara.
 „ Akeno Aviation School..... Maj.-Gen. S. Keuchi.
 „ Tokorozawa Aviation Sch.. Maj.-Gen. K. Furuya.
 „ Shimoshizu Aviation School Maj.-Gen. Y. Aramaki.

Director, Mil. Communication School...	Maj.-Gen. T. Iwakoshi
" Military Prep. School (Tokyo)...	Col. G. Endo.
" Military " " (Hiroshima) Col. Onozaki.	
" Military Training School (Sendai) Col. T. Hiraga.	
" " " " (Toyohashi) Col. H. Takeda.	
" " " " (Kumamoto) Col. T. Fukazawa.	

Standing Army

Name of Division	Commander Lt.-Gen.	Name of Division	Commander Lt.-Gen.
Guards.....	T. Hasegawa.	9th.....	R. Nagai.
1st.....	E. Hata.	10th.....	S. Honjo.
2nd.....	S. Akai.	11th.....	R. Koizumi.
3rd.....	K. Yasumitsu.	12th.....	H. Kanayama.
4th.....	Y. Hayashi.	14th.....	K. Miyaji.
5th.....	H. Haraguchi.	16th.....	H. Matsui.
6th.....	H. Fukuda.	19th.....	H. Watanabe.
7th.....	J. Watanabe.	20th.....	H. Uyehara.
8th.....	J. Shinzaki.		

Commander of Chosen Army.....	Lt.-Gen. H. Kanaya.
" " Taiwan Army	Lt.-Gen. T. Hishikari.
" " Kwantung Army	Lt.-Gen. C. Muraoka.
" " Garrison in China.....	Lt.-Gen. K. Arai.
" " Tokyo Garrison.....	Lt.-Gen. S. Kishimoto.

The Navy.—Minister	Adm. K. Okada.
Parliamentary Vice-Minister	S. Uchida.
Permanent Vice-Minister	Vice-Adm. M. Osumi.
Parliamentary Counsellor	K. Matsumoto.
Director, Military Affairs Bureau....	Rear-Adm. M. Sakonji.
" Personnel Bureau	Rear-Adm. N. Fujita.
" Supplies Bureau	Vice-Adm. I. Ikeda.
" Construction Bureau	Dr. K. Majima.
" Education Bureau	Rear-Adm. N. Suyetsugu.
" Medical Affairs Bureau Sur.-Vice-Adm.	Y. Onuki.
" Account Bureau.....	Paymaster-Adm. R. Kato.
" Law Affairs Bureau.....	S. Yamada.

Chief, Fleet Administration Dept....	Vice-Adm. K. Yamanashi.
" Aviation Dept.	Vice-Adm. E. Yamamoto.
" Hydrographical Dept.....	Rear-Adm. S. Yonemura.
" Technical Investigation Dept.	Rear-Adm. J. Hiraga.

Director, Naval Staff College.....	Rear-Adm. R. Nakamura.
" Cadets School	Vice-Adm. T. Torisu.
" Engineering School.....	Rear-Adm. T. Shimizu.
" Medical School	Surg.-Rear-Adm. R. Ogawa.
" Gunnery School	Rear-Adm. S. Shikage.
" Torpedo School	Rear-Adm. S. Yasumi.
" Submarine School	Captain T. Omoto.
" Paymaster School..	Paym. Rear-Adm. K. Karibe.
" Gun Powder Factory.....	Rear-Adm. T. Hatano.
" Briquet Factory	Rear-Adm. K. Endo.

Naval Staff Board.—Chief.....	Adm. K. Suzuki.
Vice-Chief	Vice-Adm. K. Nomura.

Naval Stations:—

Yokosuka: Commander-in-Chief.....Vice-Adm. Y. Yoshikawa.
Kure: Commander-in-Chief.....Adm. N. Taniguchi.
Saseho: Commander-in-Chief.....Vice-Adm. S. Furukawa.

Imperial Fleet:—**Combined Fleet:**

Commander-in-ChiefAdm. K. Kato.

1st Squadron:

Commander-in-ChiefAdm. K. Kato.

2nd Squadron:

Commander-in-ChiefVice-Adm. K. Otani.

Secondary Naval Ports:—

Malzuru: Com., Vice-Adm. N. Iida; Mako: Com., Vice-Adm. K. Shichita; Ominato: Com., Rear-Adm. Y. Shima; Chinkai: Com., Vice-Adm. J. Kiyokawa.

Arsenal Chiefs:—Rear-Adm. T. Tatsuno (Yokosuka); Ord. Vice-Adm. J. Godo (Kure); Rear-Adm. T. Kuroda (Hiro); Rear-Adm. Y. Taniguchi (Saseho).

CHAPTER VIII

DIPLOMACY

PRIOR TO THE RESTORATION OF 1868

Throughout her long history Japan's foreign intercourse has been marked by constant and constructive efforts to preserve her national security and at the same time to adopt and assimilate new alien civilizations, spiritual as well as material. This was amply illustrated not only in the beginning of Japanese relations with China and Korea but also at the time when this country came into contact with Occidental peoples. It is quite natural that Japan's relations with China and Korea antedated those with the nations of Europe and began in an age with which the present survey is not concerned. A few remarks, however, may with propriety be made on our earlier relations with China and Korea, so that the underlying causes of events in later days may be made clearer.

After the Empress Jingo's expedition to South Korea and the establishment of a resident Japanese Government in one of the then warring Korean kingdoms in 346 A.D., Japan began systematically to introduce Chinese culture and learning through the Korean Peninsula, and soon afterwards Chinese influence over Japan became so great that, toward the end of the sixth century, the Prince Regent Shotoku felt the diplomatic need of building an imposing Buddhist temple and pagoda at Tennoji to impress the Chinese envoys and traders who came to the port of Osaka. Seventy years later, the Emperor Tenji had to assist one of the Korean kingdoms against the encroachment of the powerful Tang dynasty of China. In the thirteenth century Japan's security was menaced for the first time in her history by the invasion of the Western shores of Kyushu by the Yuen, or Mongol Chinese, who were eventually repulsed with the incidental aid of a tempest. At the same time political refugees from China welcomed in Japan had a restraining influence over the conquerors. Toward the close of the sixteenth century Hideyoshi, the then actual ruler of this country, despatched a punitive expedition to Korea for a diplomatic assertion of our national independence which was sometimes disregarded by the Korean kings. It ended in failure, ostensibly owing to the death of Hideyoshi but actually and mainly because China sent help to Korea which she claimed as a vassal state. When the Manchus conquered and established their rule over China, Chinese refugees came over to Japan and contributed to the progress of our civilization in the middle of the seventeenth century.

As previously stated, through the Korean Peninsula we early came into contact with the civilization of the Asiatic Continent as well as with that great religion of the Orient—Buddhism. So that, when in the middle of the sixteenth century Portuguese and Spanish traders appeared on the scene, the country, which had been under the continuous regime of the Shogunate since 1192,

was in a highly advanced state both socially and from a political point of view. As is well known, these forerunners of European intercourse brought with them another great religion of the world, viz., Christianity, which was destined to have a far-reaching effect upon the subsequent course of our history. Thus introduced, the future augured well for the prospects of the new religion, and chronicle records the despatch in 1582 of an embassy to Rome by the Christian feudatories of Arima, in the Island of Kyushu. It was shortly after this that Dutch and English traders reached Japan and obtained complete freedom of trade with the country. But the activities of the Jesuits, and later of the Franciscan and Dominican missionaries, who by this time had succeeded in erecting churches in various centers of the country, now assumed a certain political character; and this, in addition to the apprehensions which were mainly due to the warning by the Dutch traders who subsequently came to Japan that Spain and Portugal—the countries from whence they had arrived—were plotting to conquer it, induced the Shogunate Government to reverse its hitherto lenient, even friendly, attitude towards them. Accordingly, in 1614, it ordered their total expulsion and proscribed the propaganda of Christian theology in Japan. That the ban was not intended to prejudice our commercial relations with Protestant Europe is conclusively shown by the encouragement given by the Shogunate authorities to the Dutch and English trade. Even so, however, the conviction that Christianity was an instrument of European aggression finally drove them to terminate their policy and to issue in May, 1636, the famous decree of isolation, or "closed country," whereby Japan was literally closed to the rest of the world and all Japanese subjects were forbidden to go abroad. Thenceforth only a few Chinese and Dutch traders were permitted to remain at Deshima in Nagasaki, and by 1790 the number of Dutch merchantmen calling at that port was restricted to one vessel annually.

It will be apparent from the preceding that the isolation of Japan was primarily due to her fear of foreign invasion, not to any disinclination on her part either to tolerate Christianity or to continue intercourse with the countries of the West. Likewise it must have been obvious that this policy of enforced seclusion, albeit it secured for her nearly two centuries of uninterrupted peace (certainly a remarkable fact in itself), could not permanently be maintained. The first nation to challenge it was Russia, which in 1775, and again in 1793, urged the opening of Japanese ports to Russian trade. The failure of the Russian emissaries to realize their mission accounts for the attack by two Russian vessels of the coast of Saghalien in 1806, where they plundered a Japanese town and carried away a number of its inhabitants. This and similar incidents occurring in the northern extremes of the Empire undoubtedly gave warning of the danger from which it had been believed to be immune. Further, the British attempts during the Napoleonic wars to replace the Dutch at Deshima, and the appearance of an American vessel, the *Morrison*, in the Bay of Yedo (present Tokyo) in 1837, served to bring home to certain of our statesmen what proved to be the inevitable fact, that sooner or later the Powers of Europe and America would insist on their right or privilege to treat with the country. But the Tokugawa Shogunate, still committed to its policy of self-containment, was not as yet prepared to abandon it, when in February, 1844, King William II of the Netherlands

conveyed to it his friendly counsel to the effect that Japan should enter into treaty relations with the said Powers. In 1853, however, a formidable American fleet under Commodore Perry visited our shores to urge Japan to open her doors to foreign intercourse. The result was the conclusion of Japan's first treaty of amity with the United States—indeed, the first treaty she has ever made with a foreign country. In this treaty, dated March 31, 1854, the former power consented to open the ports of Shimoda and Hakodate to American citizens; to reciprocate on an equal and uniform basis their friendly intercourse with the people of Japan; and mutually to extend aid and assistance to vessels in distress. The American example in this regard was presently followed by Russia, Great Britain, France, etc.

But the weakness and inability of the Shogunate Government displayed in dealing with foreign affairs and the fact that it acted of its own accord without the Imperial command incensed the anti-foreign and anti-Shogunate elements, who murdered several foreigners and attacked foreign ships. The result was the bombardment of Kagoshima by a British squadron in 1863, and of Shimonoseki in the ensuing year by the allied squadrons of Great Britain, the United States, France and Holland. (An instance may well be cited to illustrate the causes of discontentment of the people. In 1861, Russians seized the island of Tsushima in the Japan Sea, presumably for the purpose of securing a coaling station for her fleet in the Far East, and remained there until she was forced to withdraw through the efforts of the British Minister Sir Rutherford Alcock and Admiral Hope of the British China Squadron.) This state of affairs in the country culminated in 1868 in an epochal and, indeed, much-desired turn of events, namely, the restoration by the Shogunate of its civil and military powers to the Throne, which had in effect been delegated to it for nearly seven centuries. Besides, it should be added that the Imperial sanction had already been obtained for the international engagement concluded by the Shogunate Government, and that the safety and welfare of foreigners in Japan were at the same time assured—and it was in this manner that we at last envisaged a new era in the annals of our relations with the nations of the world.

EARLY MEIJI ERA (1868-94)

The problems confronting the "renascent" Japan were multifarious. But so far as concerned the nation externally, the two outstanding features of her foreign policy were: firstly, to reassert those rights which were inherent in her as an independent Power; secondly, to effect the revision of her one-sided treaties. Of the first, it may be noted that the difficult transition from feudalism, with the vision of those in authority confined to the narrow limits of the Empire, doubtless afforded opportunities for foreign encroachment and aggression. The seizure of Tsushima by Russia has been already referred to. Moreover, the same Power, by penetrating Saghalien and the Kurile Islands where the feudatory of Matsumaye had from early times exercised jurisdiction, demanded that the Prouse Strait should be fixed as the boundary line between the Japanese and Russian Empires. The Japanese authorities proposed on their part that the fiftieth parallel should be made the line of demarcation, but the proposal

was not accepted by the Tsar's Government. The question thus remained in suspense for many years; and was only brought to an end in 1875 by Japan's acquiescence in the counter-proposal that the whole of Saghalien should be surrendered in return for the Kurile group of islands, which in fact never belonged to Russia. Similarly, the sovereignty over the Bonin Islands had been a subject of discussion between the Governments of Japan and the United States. In this case, however, the cordial recognition in 1857 by the American Government of our priority resulted in a speedy termination of the controversy. Another occurrence requiring notice here was the expedition to Formosa, which was provoked by the massacre of certain stranded Loochoosans by the Formosan aborigines. Seeing that justice could be obtained in no other way, Japan sent to the island a punitive force and occupied it without difficulty. To this China objected as being a "breach of her sovereignty," notwithstanding her earlier reply in an opposite sense—consequently the relations between the two Powers were severely strained. But, in the end, the matter was amicably disposed of by the mediation of the British Minister at Peking, Mr. Wade (afterwards Sir Thomas Wade), on payment of an indemnity by China. Beside these, the so-called Maria Luz Affair embroiled us with Peru. The facts were that a Peruvian ship of that name entered the harbour of Yokohama in 1892, with 200 Chinese slaves on board. It so happened that one of those ill-treated men escaped from confinement and applied to the port authorities for protection; whereupon the latter seized the ship and immediately released the Chinese aboard. The case was ultimately referred to a tribunal presided over by the Emperor Alexander II of Russia, and the decision rendered fully sustained the action of the authorities concerned. It is hardly necessary to say that this victory of the nation in a dispute involving a question of humanity tended to enhance its position internationally.

As for the second phase of our foreign policy during the early Meiji era, it may be pointed out that the treaties concluded by the Shogunate Government deprived Japan of the rights both of judicial and tariff autonomy, though they contained a clause providing for their revision after the year 1872. It was therefore left to the Imperial Government to recover what had been lost by the former's inadvertence, with which object it set to work as soon as the stipulated time drew near. Accordingly Prince Iwakura was despatched to America and Europe in 1871 with a view to effect treaty revision with the Western Powers; but the mission proved abortive, mainly because the country was not in its turn prepared to offer suitable guarantees. Apart from this, the solution of the problem was made well-nigh impossible by the fact that the eighteen treaty Powers, which were pledged among themselves to act conjointly in their negotiations with Japan, were unable to find a common basis of agreement. Some of them were in favour of low import duties; others were reluctant to place their subjects or citizens under the jurisdiction of Japanese courts. It is true, the United States showed its willingness to conclude a separate treaty with us and to surrender the two obnoxious points in the old instrument. Nevertheless, a proviso to the effect that the new treaty should not become operative until after the signing of similar treaties with other Powers practically left the matter in status quo. In spite of this, the statesmen of regenerated Japan steadfastly held their course

for the liberation of the nation from its unilateral obligations. So, in 1882, Count (afterwards Marquis) Inouye, the then Foreign Minister, approached the British Government with a series of proposals, and the result was the conference of the treaty Powers at Tokyo four years later, at which concessions were to be made by both parties. Meanwhile, the terms of the projected treaties having leaked out, the press and people bitterly attacked the provision for a "Mixed Court" which permitted a certain number of foreign judges to sit on the Japanese Bench. This obliged the Government to postpone the settlement of the question until a more favourable moment. Next, it was attempted by Count (afterwards Marquis) Okuma to induce the Powers to abandon their extraterritorial rights on the basis of permitting the presence of foreign legal assessors in the Tai-shin-in (the Supreme Court) in cases which concerned foreigners. Many Powers, including Mexico, the United States, Germany, and France, agreed to the new formula; even Great Britain, whose preponderant commercial interests in Japan had made her the arbiter of the situation, was in their train. But the chagrined populace once more rose against the appointment of foreign assessors and forced the valiant Foreign Minister to drop the negotiations. His successors, both Viscount Aoki, subsequently our Minister at the Court of St. James, and Viscount Enomoto, likewise endeavoured for the attainment of the same end; but without success. Then, in 1893, the Lower House of the Imperial Diet voted an address to the Throne recommending the early revision of the unjust treaties, which, above all, were "derogatory to our national dignity." The action convinced the Government that thenceforth it had not only to deal with the Powers, but also to face the Imperial Diet which was supported by a formidable array of public opinion. Furthermore, war with China because of the Korean question appeared imminent. In these circumstances it dissolved the legislative organ of the nation and resumed, at the invitation of the Rosebery Ministry, its negotiations with Great Britain, with Count Mutsu as Minister for Foreign Affairs. The outcome was the memorable Treaty of Commerce and Navigation of the 16th July, 1894, whereby Great Britain recognized our jurisdiction over British subjects in Japan and the right to levy import duties on goods imported from that country and its colonies. Other Powers followed Great Britain in quick succession; and thus it was that a problem which had agitated the nation for forty long years was finally solved.

THE SINO-JAPANESE WAR

Reference may now be made to the Korean question which involved us twice in foreign wars, once with China and then with Russia. That was chiefly due to the geographical importance of the Peninsular Kingdom, which, until its voluntary annexation to Japan in 1910, was a source of ever-present danger to the security of the nation. Historically speaking, each of the parties to the first-mentioned war had an interest in Korea because of its dual tributary position in respect of both; although the claims of Japan were the earlier in origin and were exercised for a longer space of time than those of China. This, however, is immaterial. In 1875, a Korean fort on the island of Kang-Hwa fired upon a Japanese warship. This incident finally led to the conclusion of

a treaty of amity between Japan and Korea, dated February 27, 1876. Article I of this treaty laid down: "Chosen (or Korea), being an independent State, enjoys the same sovereign rights as does Japan". This provision gave offence to China who would still treat Korea as a vassal state. On the other hand, factional strife in Korea not only made all orderly government impracticable, but greatly injured Japan's rights and interests there. As a case in point we may mention the disturbances of 1882, in which a band of discontented Korean soldiers revolted against the Ming family at the instigation of Tai-weng Kun, the King's father, who was contriving to undermine the power of the Queen and her coterie. The Queen narrowly escaped; but the mob killed a number of Japanese officers in the service of the Korean Government and, without the slightest provocation, attacked and burned the Japanese Legation in Seoul. As a result of our remonstrances, Korea agreed in the so-called Chemulpo Convention to pay us an indemnity and to build at her own cost barracks for the Legation guards. Subsequently Japan remitted the major portion of the indemnity on the understanding that it should be used for the purpose of internal reforms. Within two years, however, more serious complications arose out of the murder of Prince Ming, the leader of the Reactionary Party, and other conservative leaders, by men belonging to the Korean Progressive Party. The city of Seoul being then in a state of turmoil, the King and the progressives asked for the assistance of Japanese troops for the protection of the Palace, whilst the Ming Party appealed to the Chinese Resident, Yuan Shi-kai, for its recovery. The Chinese troops, who had a numerical strength of twenty to one over the Japanese, attacked the Palace and destroyed our Legation as well. The news of the Chinese outrage was received in Japan with general indignation: the people clamoured for war. But the self-restraint and caution of the Government finally led to the conclusion of the Treaty of Tientsin with China, which was signed on April 18, 1885, and removed the prospect of immediate war. By this treaty, China for the first time formally admitted Japan's absolute equality of rights in Korea and each of the Contracting Parties undertook to withdraw its troops from the peninsula and not to despatch any in future without previous notice to the other.

It has been commonly thought that the Treaty of Tientsin was a diplomatic triumph for Japan in so far as China admitted her absolute equality of rights in Korea. But it became in reality the basis of China's ascendancy in that country—regarding which the Chinese Government still persisted in its claims of suzerainty—and an indirect cause of the war of 1894-95. The reasons for this are not far to seek. Japan's preoccupation during the interval with various domestic problems, such as the promulgation of the Constitution, the struggle between the Government and the Diet, etc., on the one hand, and the control of the Korean Court by the Mings, who derived their power from China's overlordship, on the other enabled the ambitious Chinese Resident to gain the upper hand in the affairs of Korea and to undo the internal reforms initiated at the instance of the former. Following this, Kim Ok-yun, one of the leaders of the Reform Party and a refugee in Japan since the disturbances of 1884, was, with the apparent connivance of the Chinese authorities, assassinated by a Korean notable who had accompanied him to Shanghai. The remains of the victim were conveyed on board a

Great Britain. This alliance of the two Island Empires was consequent upon various developments which brought to light a sharp divergence between their policies regarding China and those of Russia and Germany in particular. We have already adverted above to the fact that China had appealed to Russia for intervention in her quarrel with Japan. This fact and the retrocession by Japan of the Liaotung Peninsula were, so to have it, capitalized by that Power to arrange in May, 1896, the notorious treaty of defensive alliance with China vis-à-vis Japan. By this treaty Russia obtained from China the right to extend the Siberian Railway through Manchuria "in the direction of Vladivostok," together with certain other privileges both political and military. These concessions on the part of the Chinese Government were followed by Germany's demands upon it under the pretext of compensation for the murder of two German missionaries by Chinese bandits, with the result that she, too, secured, in March, 1898, the provisional cession for ninety-nine years of the territory of Kiaochow in Shantung. Within three weeks, Russia once again compelled China similarly to cede for twenty-five years (the term being subject to renewal) of Port Arthur and Tallen, including the adjacent waters; and this, in spite of her declaration that "the possession of the Peninsula of Liaotung, claimed by Japan, would be a constant menace to the capital of China..... and would henceforth be a perpetual obstacle to the permanent peace of the Far East." The Russian seizure of Port Arthur having materially altered the balance of power in the Gulf of Pechili, Great Britain also leased Wei-hai-wei and its approaches under the same conditions as Russia. Likewise France obtained a lease of Kwang-chow Bay, in point of time co-extensive with the occupation of Port Arthur and Wei-hai-wei. Great Britain and Russia then mutually engaged not to seek railway concessions in each other's spheres of influence, whilst the United States came out with the celebrated doctrine of equal opportunity for all nations in such spheres of influence. But nothing prevented the execution of Russia's policy as regards Manchuria, so that at the end of the Boxer uprising in China (in the course of which Japan played a prominent role in the rescue of the besieged foreigners) she was in fact its master by force of arms. Hence the well-known Anglo-German Convention of 1900 was intended to apply to Russian activities there as well as in other parts of the Chinese Empire, and stated in unmistakable terms that, should any Power utilize the complications in China for the purpose of seeking territorial advantages prejudicial to the interests of China and other Powers, the Signatory Powers would come to a preliminary understanding as to the measures to be taken for the protection of their own interests. Subsequently, however, Germany—which appears to have reconsidered her position in relation to Russia—took exception to the *modus vivendi* and claimed that Manchuria, where she had no interest at all, was excluded from its scope. This emasculated the agreement, to which Japan was also a party.

It was under these circumstances that our First Treaty of Alliance with Great Britain, dated the 30th January, 1902, was concluded. The preamble to the treaty read: "The Governments of Japan and Great Britain actuated solely by a desire to maintain the status quo and general peace in the Extreme East, being moreover specially interested in maintaining the independence and territorial integrity of the Empire of China and the Empire

of Korea, and in securing equal opportunities in those countries for the commerce and industry of all nations hereby agree as follows." It provided that it would be admissible for either of the High Contracting Parties to take, in case of emergency, necessary steps to safeguard its interests in China and Korea; and that, if, in safeguarding those interests, either of them became involved in war with another Power, the other High Contracting Party would endeavour to keep outside Powers neutral, but would enter the war in the event of any other Power or Powers joining in hostilities against that ally. It was also agreed that Japan, in addition to the interests which she possessed in China, was interested "in a peculiar degree, politically as well as commercially and industrially, in Korea." The treaty of 1902 was revised at the end of the Russo-Japanese War (August 12, 1905) in order to make it more effective. In the Second Treaty of Anglo-Japanese Alliance, the High Contracting Parties agreed to consider in common the measures which should be taken to safeguard the maintenance of their territorial rights in the regions of Eastern Asia and of India and the defense of their special interests in the said regions; and that, if by reason of unprovoked attack of aggressive action, either Contracting Party should be involved in war in defence of its territorial rights or special interests referred to, the other Contracting Party would at once come to the assistance of its ally and would conduct the war in common. It also provided that Great Britain should recognize Japan's paramount political, military, and economic interests in Korea and her right to take such measures as she might deem proper and necessary to safeguard and advance those interests, and Japan Great Britain's special interest in all that concerned the security of the Indian frontier and her right to take such measures in the proximity of that frontier as she might find necessary for safeguarding her Indian possessions. This treaty was further revised on July 13, 1911, in order to adapt it to the changed conditions and a clause was then inserted in it to the effect that if either of the High Contracting Parties concluded a treaty of general arbitration with a third Power, nothing therein should entail upon such Party an obligation to go to war with the Power with whom such treaty of arbitration was in existence. The stipulation, which was seemingly directed to allay the somewhat irritated feeling in the Japanese-American relations, doubtless weakened the force of the alliance as such; it should be recognized, nevertheless, that it exerted a wholesome influence in preserving "the general peace in the regions of Eastern Asia and of India"; etc. Finally it was replaced by the so-called Four Power treaty concluded at Washington in December, 1921, between France, Great Britain, Japan, and the United States, whose object it is to maintain the Signatories' rights in respect of their insular possessions and dominions in the Pacific. The Alliance thus came to an end in letter, but the spirit of this time-honoured treaty remains and will remain in the most cordial friendship of the two island Empires.

THE RUSSO-JAPANESE WAR

The war with Russia, in which Japan engaged only after repeated efforts on her part to avoid it, was brought about by an issue which not merely affected her own safety but also the

common interests of the Powers concerned in the Far East. Indeed, Russia might easily have converted her position in Manchuria into a permanent one by legalizing her de facto possession of the territory, just as she had done in the case of her Maritime Province some forty years before. The first such attempt was made in 1900 by the conclusion of an agreement with the Tartar General Tseng of Mukden. Against this procedure on the part of the Russian Government Japan formally protested. At the same time China was urged by her, as well as by Great Britain and the United States, not to sanction the agreement. But Russia, not to be outdone, attempted a second and a third time to enter into a secret arrangement with China, and failed on each occasion owing to the vigilance and firm attitude of the Powers. The vigour with which she then pursued her end was no doubt attributable to two causes: One of these was the completion of the Siberian Railway and its branch line, the Chinese Eastern Railway, which greatly added to her strength in the Far East. The other was the extended application to the Far East, almost synchronously with the conclusion of the Anglo-Japanese Alliance, of her entente with France. Thus supported by her ally, and, with the connivance of Germany, Russia soon constrained China to sign a convention by which she secured many important concessions in Manchuria. Under the strong pressure of the Powers' advice to China, Russia agreed in April, 1902, to withdraw a portion of the Russian troops there within six months, a second portion within a year, and the remainder within eighteen months. But, contrary to the expectation that Russia would keep to the agreement, her new demands on China were as much opposed to the principle of the open door in that country as her actual annexation of the occupied territory. Some of these demands were: That China should not open any free port in Manchuria; that she should not employ foreigners, except Russians, in her service in the north; that the Russo-Chinese Bank should collect the customs returns as theretofore; that Newchwang should be under Russian administration.

From the Japanese point of view, however, the Russian descent on Manchuria constituted only one half—the less important half—of the whole question. As might be surmised, the more important half was that of Korea, where some of the keenest diplomatic battles were being fought. There the nation had to face, beside the Russians, the necessity of pressing upon the apathetic Koreans measures of reform, unless it was prepared to abandon the fruit of its victory in the recent war with China. The Mings now turned to Russia for support; and the situation thereby created was not altogether dissimilar to that which preceded that war. Korea discharged our officers in her army to appoint Russians in their place and even conceded to that Power the right to extend the Manchurian Railway into the heart of the Peninsula. These had become the basis of the Russian claims in Korea, and aroused keen apprehensions in Japan as to the intention of the Russian Government. Accordingly the so-called Komura-Waerber Agreement of May 14, 1896, and the Yamagata-Lobanoff Convention of June 9, *idem*, were concluded. By the first, both Japan and Russia might maintain in Korea, pending the restoration of order, a maximum force of eight hundred men for the protection of their Legations, Consulates, and commercial settlements. By the second, it was agreed that the Signatories should enjoy in Korea equal rights of

residence and have advisory powers for the purpose of inaugurating a sound financial system in that country. These agreements, it was hoped by Japan, would at least serve to prevent Russia from seeking any further privileges prejudicial to her own interests. But no sooner were they signed than Russia began to violate their terms, till Japan found it necessary once more to act. The result was the Nishi-Rosen Convention of April 25, 1898, in which each Power recognized the independence of Korea and pledged itself not to lend any military or civil advisers to that country without the consent of the other. In addition Russia agreed, "in view of the great development of the commercial and industrial enterprises of Japan in Korea, as also of the considerable number of the Japanese subjects residing in that country," not to obstruct "the development of the commercial and industrial relations between Japan and Korea." However, this convention also failed in its purpose, and Russian activities in Korea became more rife than ever. Especially did the activities of the Russian naval authorities in connection with the purchase of large tracts of land in places like Fusan and Masampo, the erection of hospital buildings, frequent visits to those ports by the Russian Pacific Squadron, and similar occurrences suggested some ulterior motive on the part of Russia—a possible acquisition on the Korean coast of a connecting link between Port Arthur and Vladivostok. What was more, she was repeating in Korea what she had done in regard to Saghalien and Manchuria; that is to say, she was sending there numerous settlers, almost all of them soldiers in mufti, in order to strengthen her position in a diplomatic and military sense.

Thus Japan was being step by step forced into war. And yet her Government clung to pacific measures, in spite of the general dissatisfaction of the people. The Japanese Minister at St. Petersburg was therefore instructed to open negotiations with the Russian Government, with a view to define their respective interests in Korea and Manchuria. His proposals were in substance: (1) Mutual engagement to respect the independence and territorial integrity of China and Korea. (2) Reciprocal recognition of Japan's preponderating interests in Korea, and Russia's special interests in Manchuria. These the Russian Government met with the following counter-proposals after much delay, during which the negotiations had been transferred to Tokyo at its instance: (1) Recognition by Japan of Manchuria and its littoral as in all respects outside her sphere of interest. (2) A neutral zone to be formed in Korea, to extend from the south of the Yalu River to the thirty-ninth parallel. Naturally these counter-proposals were regarded in Japan as indicative of Russia's lack of sincerity; but the Government, still desirous of settling the question without an appeal to arms, continued the negotiations and went so far as practically to agree to declare Manchuria and its littoral as being outside Japan's sphere of interest, provided that Russia made a similar declaration with regard to Korea. But Russia proposed in turn that Japan should not fortify the south-eastern coast of Korea. In doing so she made no reply to Japan's compromise, which was offered after "the most careful and serious consideration," and began to pour troops into Manchuria and to reinforce her fleet in the Far East with more battleships and cruisers from Kronstadt. It was now evident to the least astute what Russia had in view. In consequence, nothing remained for Japan but to break off the nego-

tations and sever diplomatic relations with Russia, which decision was followed by her declaration of war on the 10th February, 1904.

As a matter of fact, this was the first conflict, in a modern sense, between a European and an Asiatic nation, and naturally attracted very keen interest and speculation all over the world. The result was a marked victory of the Japanese forces on land and sea over the formidable army and navy of Russia. After the decisive battles of Mukden and of the Japan Sea where the Russian fleets were completely destroyed, the belligerent Powers were brought together for a peace parley at Portsmouth, New Hampshire, U.S.A., through the good offices of President Roosevelt of the United States, and thus the Russo-Japanese War was terminated by the Treaty of Portsmouth concluded on the 5th September, 1905. This treaty recognized Japan's "paramount political, military, and economic interests" in Korea; provided for the evacuation of Manchuria both by the Japanese and Russian armies; transferred to Japan the Russian lease of Port Arthur, Talien and the adjacent territory and territorial waters, as well as all rights, privileges and concessions connected therewith; transferred, also, the Russian railways in Manchuria, viz., the railway between Changchun and Port Arthur and all its branches; and secured for Japan the southern half of the Island of Saghalien up to the fiftieth parallel. Further, Russia engaged by Article XI of the treaty "to arrange with Japan for granting to Japanese subjects rights of fishery along the coasts of the Russian possessions in the Japan, Okhotsk and Behring Seas."

RELATIONS WITH FRANCE

In April, 1904, an important diplomatic event occurred in Europe. The allusion is to the Entente Cordiale between France and Great Britain, the ally of Japan, which averted the much apprehended conflict of the two first mentioned Powers and formed a Triple Entente between Great Britain, France and Russia. It cannot be denied that the Anglo-French rapprochement had a most salutary, though incidental, effect upon the Far Eastern situation after the Russo-Japanese War—more particularly it anticipated our arrangement with France of the 10th June, 1907. This arrangement, entered into in order to eliminate from the relation of the two countries the causes of misunderstanding and thereby to consolidate them, provided in effect as follows: The Governments of Japan and France, being in agreement to respect the independence and integrity of China as well as the principle of equality of treatment in that country concerning the commerce, subjects or citizens of all nations, and having a special interest in seeing the order and peaceful state of things firmly established in regions of the Chinese Empire in the neighbourhood of territories where they have the rights of sovereignty, protection, or occupation, engage themselves for mutual support to insure peace and security in those regions, with a view to maintain the respective positions and territorial rights of the two Contracting Parties on the Continent of Asia. The arrangement was accompanied by a declaration relative to French Indo-China, where the functionaries and subjects of Japan were to be accorded, until the expiration of the Treaty of Com-

merce and Navigation between France and Japan of August, 1896, most favoured nation treatment in so far as concerned their persons and property. Conversely, the same was to hold good in regard to the subjects and protégés of Indo-China. In August, 1911, a new Treaty of Commerce and Navigation was signed with France, and, pending its application to Indo-China, the declaration given above was to continue in force. As under the older treaty, this has had a peculiar result: for, in the absence of any treaty stipulations, our export merchandise was charged, and has remained charged, with the highest duties in that French colony. Accordingly the Japanese Ambassador at Paris was instructed in April, 1924, after so many years' abeyance, to propose to the French Government the revision of the treaty of 1911 and the extension of its scope so as to remedy this abnormal situation. The proposal was followed by a friendly visit of the Governor-General of Indo-China, M. Merlin, to Japan in May of the same year, and by the despatch of our Special Mission headed by Prince Yamagata to return the courtesy to Indo-China in February, 1925. Subsequently it was suggested by the French Government that the question should be dealt with independently from that of the revision of the existing treaty; in this suggestion the Japanese Government concurred. Negotiations, therefore, were opened at Paris, but so far no agreement on the points at issue appears to have been reached.

RELATIONS WITH THE UNITED STATES

For many years after the conclusion in 1854 of the first treaty of amity between Japan and the United States, which was the first of its kind ever signed by this country with a Western Power, the relations between the two countries were characterised by exceptional amity and friendliness. Indeed, the contributions that have been made by the United States to progress in Japan of politics, education, industry, diplomacy, etc. since Japan opened her doors to foreign intercourse are too many to enumerate here. Further, the traditional good will shown to this country by Mr. Townsend Harris and other succeeding American representatives here told most eloquently of the cordial friendship of the American people towards Japan. In recent years, however, these exemplary friendly relations have been marred by divers unpleasant complications and it is undeniable that the feelings of the two nations towards one another are not so cordial as in bygone days. A difference of opinion first arose in connection with an incident that took place in October, 1906. It related to the action of the School Board of San Francisco which, at the instigation of certain agitators opposed to the Japanese and Korean laborers, passed a resolution excluding the children of those nationalities from the public schools under its supervision. After futile attempts to obtain justice from the local authorities, our Ambassador at Washington laid the matter before the Federal Government and was assured of its willingness to endeavor to effect an equitable adjustment of the difficulty. But the anti-Japanese elements in California prevailed upon President Roosevelt to promise that he would prohibit the influx of Japanese laborers from Hawaii and secure the restriction of Japanese immigration to the United States, provided that the segregation order of the San Francisco School Board were withdrawn. As a

result, the question was settled on the lines indicated by the American Executive. Then, an understanding was reached between the Japanese and American Governments whereby Japan voluntarily engaged herself to restrain the emigration of laborers to the United States. This was the well-known "Gentlemen's Agreement" of 1907. In order, however, to avoid any future misapprehension on the subject, Japan succeeded in deleting from her Treaty of Commerce and Navigation with the United States of 1911 Article II of the treaty of 1894, which provided that "the laws, ordinances, and regulations with regard to trade, the immigration of laborers, police and public security, which are in force or may hereafter be enacted in either of the countries" were unaffected by its stipulations. By the exclusion of this article, it was understood, at least by Japan, that neither of the Contracting Parties to the treaty would resort to legislation for the regulation of immigration. At the same time a declaration was made on the part of the Japanese Government to the effect that it was prepared to maintain with equal effectiveness the limitation and control exercised by it for the past three years in regulating the emigration of laborers to the United States. It was thought that these agreements or understandings definitely put an end to the question that had caused so much uneasiness and irritation on both sides. But that was not the case. In May, 1913, the California legislature passed an Alien Land Act depriving Japanese of the right to own real property, as well as narrowly circumscribing their right to lease land for agricultural purposes. Upon the passage of this discriminatory legislation, the Japanese Government lodged a formal protest with the Government of the United States and entered into negotiations with it in the hope that some arrangement safeguarding the rights of resident Japanese might be made. Unfortunately, no result attended these negotiations. On the other hand the "Japanese Exclusion League of California," which was not satisfied with the legislation just mentioned, sponsored and continued to campaign for a movement to appeal to the people directly for the enactment of a more stringent law in relation to land tenure. The "initiative" measure so submitted to the Californians over the head of the legislature was passed on November 2, 1920, and became operative on December 9. In addition to re-enacting the provisions of 1913, this law not only took away the right of Japanese to lease agricultural lands, but further disqualified them, in so far as the ownership of real property was in question, from being the guardians of their own children. In other words, it deprived the minors of Japanese descent, who were American citizens by virtue of their birth in America, of the benefit of their parents' guardianship concerning any landed property of which they might come into possession. A law of similar import was also passed by the State of Washington in March, 1921. Furthermore, it was decided by the Supreme Court of the United States in 1922 that a Japanese could not be naturalized under Section 2169 of the Revised Statutes of the United States. This anti-Japanese movement in the Pacific states of the United States frequently gave rise to rumors of the imminence of war between Japan and America, but the tension between both nations was greatly relieved by the conclusion of agreements respecting the limitation of naval armament and various other Pacific problems through frank and friendly pourparlers between the Japanese and American delegates at the Washington Conference. It will be per-

ceived, however, that the reason which actuated Japan in concluding the "Gentlemen's Agreement" of 1907 and making the declaration of 1911 was none other than her desire to relieve the United States from the embarrassing position of giving offence to the sensibilities and self-respect of a friendly Power. In fact, the American Government was fully aware of this and tacitly engaged on both occasions that it would not countenance any discrimination against the Japanese people. Notwithstanding this, it seems that the confidence of Japan that no such law would be made by the United States as a whole was unwarranted. On May 15, 1924, a bill containing a clause particularly directed against Japanese immigrants was passed by the two Houses of Congress and approved by President Coolidge eleven days later. Such legislation is tantamount to an open declaration that the Japanese, no matter what their individual merits might be, were, as such, inadmissible into the United States. Accordingly the Japanese Ambassador at Washington pointed out in his protest to the American Government, which had never questioned the efficacy of the "Gentlemen's Agreement," the injustice and unsavoury character of these measures. The memorandum of the Japanese Ambassador to the American Government dated May 31, 1924, made it clear that what she has objected to was the exclusive feature of the law. In her view, international discriminations in any form and on any subject, even if based on purely economic reasons, were opposed to the principles of justice and fairness upon which the friendly intercourse between nations must, in its final analysis, depend. Still more "unwelcome" were discriminations based on race. "Accordingly"—the same memorandum therefore concluded, and the conclusion doubtless stands today—"the Japanese Government consider it their duty to maintain and to place on record their solemn protest against the discriminatory clause in Section 13 (e) of the Immigration Act of 1924, and to request the American Government to take all possible and suitable measures for the removal of such discrimination."

It is true that resentment was felt throughout the country at the time when the bill was passed and even now is still felt in some quarters at this attitude of the United States towards Japan. However, the leaders of public opinion and thinkers in both countries who attach supreme importance to the Japanese-American relations and are greatly concerned about the friction caused by the unfortunate incident are striving to restore the relations between the two countries to the traditional relations of harmony and concord. The promulgation of the Ordinance of November 2, 1926, concerning the execution of the Alien Land Law, by which the ownership of land in this country by foreigners is actually recognized, is, it is generally believed, intended to help to remove a cause of dispute between the two countries that has existed for many years.

JAPAN AND THE WORLD WAR

Article II of the Third Anglo-Japanese Treaty of Alliance provided that if, by reason of unprovoked attack or aggressive action, wherever arising, on the part of any Power or Powers, either High Contracting Party should be involved in war in defence of its territorial rights or special interests in the regions

of Eastern Asia and of India—the other High Contracting Party would at once come to the assistance of its ally, and would conduct the war in common and make peace in mutual agreement with it. This being so, it was inevitable that Great Britain's declaration of war on Germany on August 5, 1914, should soon involve Japan in the great conflict. Apprehending such an eventuality, Japan had issued prior to this an announcement, stating that although she hoped for the restriction of the war to the areas already affected, it would be incumbent upon her to take all necessary steps in case the object of her alliance with Great Britain should be endangered. But the warning was not heeded by the Imperial German Government; and the activities of German war-ships in the Far East which menaced the allied overseas trade there, as well as the British request for assistance in order to cope with the situation, caused our Government to serve on Germany, on the 15th August, 1914, the following demands: (1) The German war-vessels should at once be withdrawn from the waters of the Japan and China Seas; those which could not be so withdrawn should be disarmed. (2) The German Government, with a view to its return to China, should hand over the leased territory in Kiaochow to the Japanese Government on or before September 15, 1914, without condition and without compensation. These demands were not complied with by Germany: in consequence Japan declared war on her on the 23rd of August, the last day on which her reply was to have been received. A few days later, relations between Japan and Austria-Hungary, Germany's ally, were also severed.

At first, Japan's participation in the struggle was limited to the Far East. The immediate object of her hostile operations was the reduction of the German stronghold in Tsingtao, and this she effected in November, 1914, with the co-operation of British troops. She next occupied the German South Sea islands north of the equator, and kept the highways of the Pacific and Indian Oceans free from German commerce raiders. Her fleet was then despatched as far as the Mediterranean, where it prosecuted the war in common with those of the allied Powers. Further, it largely devolved upon her to afford relief, in the summer of 1918, to the Czecho-Slovak troops in Siberia, and generally to withstand the great Russian percussion in Asia. These activities, in short, constituted her role in the World War.

Now we may turn to the Paris Peace Conference, which followed the conclusion in November, 1918, of an armistice between the allied and associated Powers on the one side and Germany and her allies on the other. The two claims made by Japan at the Conference were: (1) the adoption in the League of Nations Covenant of the principle of racial equality; and (2) the transfer by Germany of her former rights in Shangtung and the North Pacific. Regarding the first, our Delegation proposed an amendment to the draft Covenant to the effect that "the equality of nations being a basic principle of the League of Nations, the High Contracting Parties agree to accord, as soon as possible, to all alien nationals of States members of the League equal and just treatment in every respect, making no distinction, either in law or in fact, on account of their race or nationality." The amendment, whilst it secured a clear majority in its favor at a meeting in which it was discussed, was strenuously opposed by the representatives of the United States and the British Overseas Dominions; it was therefore withdrawn by Japan with the reservation

that she would press for its adoption in future as a principle of the League of Nations. Concerning the second point, it was somewhat curiously contended by the Chinese Delegation that the German rights in Shantung "automatically" reverted to China upon her declaration of war on Germany in August, 1917. But this contention was not sustainable especially in view of the Sino-Japanese treaty of May, 1915, wherein China, besides consenting to the extension of our lease of the Liaotung Peninsula, undertook "to give full assent to all matters upon which the Japanese Government may hereafter agree with the German Government relating to the disposition of all rights, interests and concessions which Germany, by way of treaties or otherwise possesses in relation to the Province of Shantung." The treaty of 1915—to which the Chinese Government latterly took exception as offering no quid pro quo—had become the basis of a new Sino-Japanese agreement, concluded at China's own instance in September, 1918, through which she obtained a loan from Japan for the purpose of developing her railways in Shantung. Moreover, Japan had the assurance that the claims in question would be supported by her allies in the war. They were accordingly upheld in the Versailles treaty, notwithstanding China's objections.

The treaty of Versailles, which was signed on the 28th June, 1919, and which finally re-established peace between the warring nations, provided for the cession by Germany to Japan of all rights and privileges as to Kiaochow and of the railways, mines and cables acquired by the German treaty with China of March 6, 1898, and by other agreements in regard to Shantung. All German rights to the railway from Tsingtao to Tsinanfu, and all facilities and mining rights as well as rights of exploitation, were likewise ceded to Japan; and the cables from Tsingtao to Shanghai and Chefoo (the cables free of all charges). Japan also acquired by the same treaty a mandate over the former German north equatorial possessions in the Pacific, including the Island of Yap. Afterwards the United States claimed that the disposition of this island had been reserved for future consideration, so that some agreement might be reached by the allied and associated Powers to place it under international control. The question, however, was settled by a mutual compromise. By the agreement arrived at in September, 1921, the United States recognized Japan's mandatory rights over these islands, while Japan, on her part, admitted the American right to erect a wireless station in Yap and the right, also, to land and use submarine cables there.

The effect of Japan's participation in the World War is far more significant in its moral influence than in its material advantages. As a result of her prudent and dignified attitude and activities at the peace conference as one of the five principal Allied and Associated Powers, her international position has been so greatly enhanced that she has now attained full recognition as a World Power in dealing with not only with Oriental questions but also purely European or American affairs.

The World War, indeed, proved an epoch-making event in Japan's international relations. The most conspicuous of all its consequences was the active co-operation of the Japanese delegates to the League of Nations with the delegates of other Powers for the stabilization and promotion of peace in Europe. Not only as a leading Asiatic nation but also as one of the foremost World Powers, Japan has played, since the inception of the League, a

most impartial and important role in the solution of the multifarious complicated problems of the European Continent. Further, as a result of the conclusion of the Versailles Peace Treaty, Japan's diplomatic relations with Germany and the pre-war friendly intercourse between the two nations have been resumed, attended by the gradual revival of their association, intellectual and otherwise. Incidentally, the normal commercial relations have been in course of restoration between both countries, and, now that understanding has been reached between the Japanese and the German authorities concerning the question of the dye-stuff trade, which had caused a deadlock in the negotiations for a commercial treaty, it is expected that the conclusion of such a pact between the two countries will be realised in the near future.

A notable phase in the post-war developments of Japan's international relations is that, in a peaceful and liberty-loving spirit, she is doing her utmost to promote commercial and cultural relations with various countries, to cultivate new fields for her trade expansion which have hitherto been neglected. For instance, following the conclusion of the Lausanne Treaty, Japan entered into relations of amity with Turkey and opened an embassy in Constantinople in March, 1925. Addressing the 51st session of the Imperial Diet, the Foreign Minister Baron Shidehara said of the Turco-Japanese relations: "For the first time in history, Japan inaugurated in the course of last year (1925), an exchange of Ambassadors with Turkey. Determined as we are to remain an independent and disinterested third party in face of the tangled problem of Europe in the Near East, we indulge in the confident hope that the sentiments of good will fostered between the Turkish people and ours since the "Ertogrul" affair of 1891 will gain in strength and solidity and that a new field of enterprise for Japanese industry and commerce will be opened in Turkey and in the neighbouring regions." In 1926, Japan also established a consulate-general in Alexandria, Egypt, which was followed by the opening of a regular line to the east coast of Africa by the Osaka Shosen Kaisha (Osaka Mercantile S.S. Co.). Quite recently, she despatched a diplomatic representative to Persia with a view to open diplomatic relations with that country.

All these activities must be taken as indications of the recent trend of Japan's diplomacy, which, while the tide of liberalism is now rising over militarism in her national life, is also perfectly in line with the above-mentioned amelioration of her policy vis-à-vis China.

THE WASHINGTON CONFERENCE

Shortly after the termination of the World War, the aspirations and endeavors of American statesmen and thinkers were directed to secure a lasting peace of the world, particularly in the Pacific region.

In July, 1921, the American Government approached the Japanese Government with an inquiry as to whether it was agreeable to Japan to receive an invitation to take part in a conference to be held at Washington with a view to discussing, with the United States, Great Britain, France, and Italy, the question of the limitation of armaments. It was suggested at the same time that the discussion should embrace the Pacific and Far Eastern problems which, in the opinion of the American

Government, were closely related to that question. The object of the proposed conference tallying with its own desire, the Japanese Government at once replied in the affirmative, although it thought it more expedient, in order to facilitate its attainment, to define the nature and scope of the problems falling under the second category. The fact was duly brought to the knowledge of the American Government and an understanding regarding the matter was reached between the two. After these preliminaries, Japan participated in the conference which was formally convoked by the President of the United States on November 11, 1921, and whose session lasted till early in February, 1922.

The Conference of Washington adopted a series of important treaties, bearing on the Powers' relations with one another. These were: (1) The Treaty between the United States, the British Empire, France, Italy, and Japan relating to the Limitation of Naval Armament. By this treaty Japan agreed, among other things, to limit her capital ships to 10 ships of 315,000 tons, and to maintain the status quo regarding the fortifications and naval bases in her insular territories and possessions in the Pacific, including the Kurile Islands, the Bonin Islands, Amami-Oshima, the Loochoo Islands, Formosa, and the Pescadores. (2) The Treaty between the same Powers respecting the Use of Submarines and Noxious Gases in Warfare. (3) The Treaty between the United States, Great Britain, France and Japan, except Italy, concerning their Insular Possessions and Insular Dominions in the Region of the Pacific Ocean. This treaty, which, as has already been noted above, replaced our treaty of alliance with Great Britain of the 13th July, 1911, and by which the Signatories undertake mutually to respect each other's rights in relation to their insular possessions and dominions in the Pacific, provides for a joint conference in case any Pacific question involving the said rights is not satisfactorily settled by diplomacy; and in case they are threatened by the aggressive action of any other Power, the High Contracting Parties are to communicate with each other as to measures to be taken, jointly or separately, to meet the exigencies of the situation. It is also explicitly stipulated in a supplementary treaty that the term "insular possessions and insular dominions" signifies, in its application to Japan, only the Japanese portion of Saghalien, Formosa, the Pescadores, and the islands under mandate to Japan. (4) The Treaty between the United States, Belgium, the British Empire, China, France, Italy, Japan, the Netherlands, and Portugal relating to Principles and Policies concerning China. Thereby, the Powers agreed to respect the sovereignty and independence and the territorial and administrative integrity of China, and to use their influence for the purpose of effectually establishing and maintaining the principle of equal opportunity for the commerce and industry of all nations throughout that country. They agreed, in addition, to refrain from taking advantage of conditions in China in order to seek special rights or privileges which would abridge the rights of subjects or citizens of friendly States, and from countenancing any action inimical to the security of such States. (5) The treaty between the same Powers respecting the Chinese Customs Tariff, whereby the Powers other than China consented to making such customs duties equivalent to an effective 5 per cent. *ad valorem*, in accordance with the existing treaties concluded by the latter with other nations. Beside these treaties, the follow-

ing resolutions were adopted at Washington: A Resolution establishing a Commission of Jurists. A Resolution regarding the Sale of Ships before the Ratification of the Treaty limiting Naval Armament. A Resolution establishing a Board of Reference for the Far Eastern Question. A Resolution regarding Extraterritoriality in China. A Resolution regarding Foreign Armed Forces in China. A Resolution regarding Radio Stations in China. A Resolution regarding the Unification of Railways in China. A Resolution regarding the Reduction of Chinese Military Forces. A Resolution regarding the Chinese Eastern Railway, adopted by the Powers including China. A Resolution regarding the same, adopted by the Powers other than China.

Further, the Conference of Washington was instrumental in solving the so-called "Shantung" question. It has already been seen that the Treaty of Versailles confirmed the title of Japan to the former German leasehold in Kiaochow and such other rights and privileges which Germany had possessed in Shantung prior to the war of 1914-18. This the Japanese Government proposed, without delay, to restore to China by direct negotiations; but the proposal was for one reason or another not accepted by the Chinese Government. At length, however, the question was disposed of at Washington, largely through the good offices of the American and British representatives, by an agreement between the Governments concerned. The agreement, which was signed on February 4, 1922, provided for the restitution of the leased territory to China; the withdrawal of the Japanese troops stationed along the Tsingtao-Tsinanfu Railway and its branches; and the transfer to China of the railways, together with all the properties appurtenant thereto, including wharves, warehouses and other similar utilities. For this, China was to reimburse to Japan the sum of 53,405,141 gold Marks (this being the assessed value of the former German properties), plus the actual amount expended by Japan for permanent improvements or additions. Likewise the agreement provided for the transfer of the mines and other concessions which the treaty of peace with Germany had vested in Japan. Its provisions, by the way, were fully carried out by a Sino-Japanese Joint Commission before the end of 1922. The amount of compensation to be paid by China for the railways in Shantung was fixed at ¥40,000,000, and the rate of interest at 6 per cent. per annum. Thus, the outstanding controversy between the two neighboring countries known as the Shantung Question has been amicably settled and, as a result, the ill-feeling which had been created among the Chinese people by the dispute has considerably subsided. Hence the Washington Conference, in a sense, may be called a turning-point in Sino-Japanese relations, which are now seeking better understanding and closer intimacy.

RELATIONS WITH THE SOVIET RUSSIA

Before proceeding on Japan's relations with Russia during and after the World War, we may recur to the Treaty of Portsmouth which restored peace between the two Powers. The opening article of this historic document read: "There shall henceforth be peace and amity between Their Majesties the Emperor of Japan and the Emperor of all the Russias and between Their respective States and Subjects." And paradoxical as it may

appear, the Russians became more appreciative of Japan and the Japanese people after the War of 1904-5 than before it, inasmuch that within a month after the conclusion of the Franco-Japanese convention of 1907, a similar convention promoting good neighborliness between them was concluded. In this convention they engaged mutually to respect each other's territorial integrity and rights with special reference to China; and promised to recognize the independence and territorial integrity of China and maintain and defend by all pacific means at their disposal the status quo and the doctrine of equal opportunity there for the commerce and industry of all nations. The agreement was somewhat amplified in 1910 by a new convention, according to which they were to co-operate for the improvement of their railway service in Manchuria and to avoid all competition detrimental to the realization of that end and to respect the maintenance of the status quo in Manchuria and to consult each other as to measures to be taken therefor. Such being the friendly sentiments subsisting between the two Empires, it was only natural that Japan should go the length of extending, during the early stage of the World War, financial and other assistance to her co-belligerent and ally. In 1916, moreover, they concluded yet a third convention, providing in effect that neither of them would be a party to any arrangement or political combination directed against the other; and that, in case their duly recognized territorial rights and special interests in the Far East should be menaced, they would concert on measures required for the safeguarding and defence of those rights and interests. Nevertheless, the Russian revolution of the following year and the events transpiring in the sequel made it necessary for Japan to take cognizance of the situation so created by the de facto authorities of Russia. It was on account of this that Japan undertook in August, 1918, after complete accord had been reached with the allied and associated Powers, the task of rescuing the Czecho-Slovaks stranded in Siberia. This task Japan and the allied Powers accomplished; and the latter withdrew their expeditionary forces in the course of the year 1920. Then occurred an incident which stirred the people of Japan very deeply. It was the wholesale massacre at Nikolalevsk of more than seven hundred Japanese, including women and children, as well as the Japanese Consul, his family and official staff. Considering the unsettled state of affairs in Russia, there appeared to be no alternative for Japan but to occupy, as a measure of reprisal and till she could obtain redress from a responsible Government, certain points in the Russian portion of Saghalien. Not only this, but the incident urgently called for the protection of Japanese lives and property in various parts of Siberia. Again, the chaos obtaining there was taken advantage of by the outlaw Koreans in the districts around Vladivostok and Nikolsk to threaten the security of the Korean frontier, and to commit acts of conspiracy against the constituted authorities of their native land. These considerations obliged Japan also to maintain, regardless of the large expenditure it entailed, an adequate force in Siberia in self-protection; and it was more than two years after the allied evacuation of the country that she was enabled to withdraw the last of her troops in the Maritime Province.

Consequently Japan endeavored as soon as an opportunity was offered to readjust her relations with the Soviet Russia. With a view to this, but in vain, negotiations were conducted at

Dairen, Changchun, and Tokyo at various dates between 1921-23. It is not doubted that the Japanese efforts in this direction paved the way for the eventual conference of the Soviet-Japanese representatives at Peking, where at last they succeeded in signing on January 20, 1925, a convention embodying the basic rules of their future relations. The Union of Soviet Socialist Republics acknowledges in the present convention—which established diplomatic connections between the two countries—that “the treaty of Portsmouth of September 5, 1905, shall remain in full force.” Besides, it was agreed by the Governments of the High Contracting Parties that the Fishery Convention of 1907, based on Article XI of the Treaty of Portsmouth, might be revised; that a treaty of commerce and navigation should be concluded in conformity with the following principles, which, pending the conclusion of such a treaty, should also regulate the general intercourse between the two countries, to wit: (1) The subjects or citizens of each of the High Contracting Parties shall, in accordance with the law of the country, have full liberty (a) to enter, travel and reside in the territories of the other, and (b) to enjoy constant and complete protection for the safety of their lives and property. (2) Each of the High Contracting Parties shall in accordance with the law of the country accord in its territories to the subjects or citizens of the other, “to the widest possible extent and on condition of reciprocity, the right of private ownership and the liberty to engage in commerce, navigation, industries, and other peaceful pursuits.” (3) Without prejudice to the rights of each Contracting Party to regulate by its own laws the system of international trade in its domains, it is understood that neither Contracting Party shall apply in discrimination against the other Party any measures of prohibition, restriction or impost which may tend to hamper the growth of the intercourse, economic or otherwise, between them, it being the intention of both Parties to place the commerce, navigation and industry of each, as far as possible, on the footing of the most favored nation. Article V of the convention stipulates: “The High Contracting Parties solemnly affirm their desire and intention to live in peace and amity with each other, scrupulously to respect the undoubted right of a State, to order its own life within its own jurisdiction in its own way, to refrain and restrain all persons in any governmental service for them, and all organizations in receipt of any financial assistance from them, from any act, overt or covert, liable in any way whatever to endanger the order and security in any part of the territories of Japan or the Union of Soviet Socialist Republics. It is further agreed that neither Contracting Party shall permit the presence in the territories under its jurisdiction—(a) of organizations or groups pretending to be the Government for any part of the territories of the other Party, or (b) of alien subjects or citizens who may be found to be actually carrying on political activities for such organizations or groups.” Two protocols have been appended to the convention: The Protocol (A) reserves for adjustment at subsequent negotiation between the High Contracting Parties “all questions of debts due to the Government or subjects of Japan on account of public loans and Treasury bills issued by the former Tsarist Government of Russia and the Provisional Government which succeeded it,” provided that in adjusting such questions the former shall not, all other conditions being equal, be placed in any position less favorable than that which

the Government of the Soviet Union may accord to any other Government or nationals on similar questions; and contains a declaration that there exists between them "no treaty or agreement of military alliance or any other secret agreement which either of them has entered into with any third Party and which constitutes an infringement upon, or menace to the sovereignty, territorial rights or national safety of the other Contracting Party." It also provides, and the provision has already been executed by Japan early in May, 1925, for the evacuation by her troops of North Saghalien. In turn, the Plenipotentiary of the Soviet Union tenders to the Government of Japan, in a note annexed to the Convention of January 20th, "an expression of sincere regrets for the Nikolaievsk incident of 1920." In the Protocol (B) the Government of the Soviet Union agrees to grant to Japanese concerns certain privileges "for the exploitation of minerals, forests and other resources" (details as to these have been left for subsequent arrangement), to waive the right to charge import and export duties on "any articles, minerals or products needed for or obtained from such enterprises," and not to collect from or impose on the latter "any such taxation or restriction as may in fact render their remunerative working impossible." Ratification of the convention above implies the ratification of these protocols. This Japan has effected on the 25th February, 1925.

RECENT RELATIONS WITH CHINA

It is true that in a certain period of the past Japan's method of treating China had been criticised as an exact copy of that of European Powers, which well deserved the criticism. The Shantung Question, for instance, showed the resentment young China had been feeling towards Japan's attitude, although she had ample justification in her contentions. In reality, however, our relations with China have for some time past been governed by a fixed and well-defined policy, of which a brief observation is now in order. This policy is based on what may be summed up as (1) non-interference in the domestic affairs of China, and (2) the safeguarding of our rights and interests there by such legitimate means as may be readily realized in view of the unsettled conditions prevailing within the Chinese borders, especially since 1922. In fact recent happenings in that country, in which the persons and property of foreigners have more than once been endangered, have fully sustained their application, in spite of unfriendly criticisms which have on many occasions been directed against Japan. Thus we assumed an attitude of neutrality during the civil war of 1924, between the Chihli and Fengtien forces. The position taken up by the Japanese Government then was consistent with its declared policy of non-intervention in the affairs of China and of strict impartiality towards each of the contending parties. The hostilities, however, appeared likely before long to embroil Manchuria and Mongolia, where Japan has, as is generally known, certain special rights and interests. The Government therefore issued on October 13th a warning to the contending parties that Japan's own security largely depended upon the maintenance of law and order in those territories, and that she deemed it of "capital importance that these rights and interests, so essential to her, be fully respected and safely

guarded." It is most unfortunate that the period of lull which followed the war came to an end within a few months; and the so-called Shanghai Affair of May 30, 1925, gave rise to anti-foreign riots in various parts of China. As regards the settlement of the international questions raised by these disturbances, our Government has communicated with the Government at Peking as well as with the local authorities of China, either jointly or separately with those of other interested Powers, and has succeeded in adjusting satisfactorily some of the issues involved. What, however, was of still more serious concern to Japan was the outbreak during the same year of a new civil war—this time between the Fengtien faction and the allied forces of Chekiang, the Kuomintang, and General Wu Pei-fu. To these were latterly added some 70,000 troops led by the Fengtien General Kuo Sung-ling, who suddenly rose against his chief, General Chang Tso-lin, and began to march on Mukden. This unexpected development caused grave anxiety in Japan, since a conflict near our railway zone in South Manchuria would jeopardize Japanese lives and property there and would seriously menace the railway itself. In these circumstances the Commander of the Japanese garrison in the Liaotung Peninsula apprized the opposing armies of the duty entrusted to him, and demanded that they refrain from any warlike acts within a certain distance of the railway zone. But the danger of such conflict having nevertheless become imminent, the Government decided on December 15th to reinstate the forces under his command (which had somewhat been depleted during the previous month) in their normal strength for the protection of Japanese lives and property. For this purpose, a detachment of 1,000 officers and men was sent from Korea and stationed along the railway until the arrival of the garrison forces. Meanwhile the battle of the Liaocho resulted in the victory of General Chang, and the restoration of peace in Manchuria rendered our emergency measures no longer necessary.

In this way, while Japan remains disinterested in China's affairs so long as they concern that country alone, she is determined to maintain her rights and interests therein at whatever cost. At the same time her Government and people have watched with sympathy and tolerance the great efforts put forth by China to carry out the work of reform in various branches of administration. It may be taken for granted, therefore, that in no case would they entertain any such suggestions as to place her railways or administrative organs under international control. Similarly it would be superfluous to say that they are willing to collaborate with China and the rest of the treaty Powers, without unduly prejudicing their vested rights and interests, in any undertaking that may be beneficial to China. This explains Japan's position respecting the two questions which are of such importance to her neighbor, and with which she herself had once to deal. One of these is the question of the customs tariff and the other that of extraterritorial jurisdiction. Hence the Japanese Delegation to the Special Conference on Chinese Customs Tariff, which was assembled at Peking in October 1925 in pursuance of the provisions of the treaty concluded at Washington in 1922, were instructed to take up the former question in the light of her own experience and in close communication with the Delegations of the other Powers. So the manifold difficulties that had stood in the way of unanimous action were successfully overcome, and,

On November 19th, at a meeting of one of the committees appointed at the Conference, a resolution accepting China's proposal was passed. Apart from the above conference, which, pending the establishment of a more stable Government in China, was adjourned in July of the year 1926, there has also been in session there, with a view to consider and report on the question of the relinquishment of Consular jurisdiction by the Powers, the Commission on extraterritoriality in China. As already pointed out, Japan is sympathetically disposed towards the Chinese desire to recover judicial autonomy. Consequently she is looking forward with keen interest to the findings and recommendations of the Commission—which are now communicated to the Chinese Government at Peking but have not yet been made public.

Lastly, it may be noted that Japan is co-operating with China in the latter's "cultural" work. This has been made possible by the "Law Concerning the Special Account of the Cultural Work for China," which was put in force on the 21st April, 1923. The funds dealt with by this law comprise some ¥44,170,000 in Boxer indemnity debentures and ¥18,000,000 in Treasury bonds paid by China in compensation for the transfer of the railways and public property in Shan'ung. Of these funds, it was enacted that ¥3,000,000 out of the yearly accruing interest should be appropriated for the purposes stated, thus enabling the authorities concerned to finance the work on a permanent basis. For its due execution, the Government has opened the "Bureau of Cultural Work for China" (subsequently renamed the Cultural Work Department) at the Foreign Office, and has also organized an "Investigation Committee on Cultural Work for China" as a consultative body to assist the Minister for Foreign Affairs. The principal items of the work now being carried on are: (1) Subsidy to Chinese Students in Japan; (2) Improvement of Facilities for Preparatory Instruction of Chinese Students; (3) Exchange of Lectures between Japan and China, etc.; (4) Subsidization of Japanese "Cultural" Institutions in China. In addition, plans have been under way for the establishment of two research institutes and a library in China—the library and a cultural science institute to be located in Peking and a natural science institute in Shanghai. These institutions, the buildings of which require an expenditure of ¥5,350,000, are now in course of construction and are expected to be completed before 1929. A joint organization, composed of citizens of both countries and consisting of a general committee sitting at Peking and local committees at Peking and Shanghai, are constituted to decide upon matters relating to their management. The General Committee held its first meeting in October of the year 1925. Quite recently, a board of directors comprising 11 Chinese and 8 Japanese members has been established in Peking for the promotion of co-ordinated efforts between the two peoples.

The Tsinan Affair

Japan's position in the last conflict between the Southern and Northern forces of China and the annoying circumstances that have developed into what is now known as the Tsinan Affair are explained in the statements issued by the Imperial Government as occasion required and the Note submitted to the League of Nations Office at Geneva. The first statement was

published on April 20 to define why Japan had decided to despatch troops as necessary measure of self-protection and is quoted in part as follows:—

"In view of the sudden change of the situation in Shantung, which has precipitated disturbances threatening to involve the region where the Japanese reside, the Japanese Government are now compelled . . . to dispatch from Japan proper a contingent of about 5,000 soldiers to the Kiaochow-Tsinan Railway zone via Tsingtao for the protection of the Japanese residents; pending the arrival of these soldiers, three companies drawn from the Japanese garrison in China will be sent to Tsinan as an emergency measure to meet the situation.

"It need scarcely be stated that the dispatch of troops by the Japanese Government . . . by no means implies anything like an unfriendly intention towards China and her people, or an interference with the military operations of any of the Northern and Southern forces. It may be added that, as soon as the Japanese Government consider it no longer necessary to maintain the troops for the protection of the Japanese residents in the affected areas referred to above, the troops will be immediately withdrawn, as on the last occasion."

It is necessary to quote at greater length from the Note to the League as it gives detail information of the circumstances occasioning the Tsinan complication. The resumé of the Tsinan incident reads in part as follows:—

a.—The Japanese troops, which arrived at Tsinan between the latter part of April and the 2nd May, 1928, established as the object of their protection an area containing about 80 percent. of the Foreign Quarter, which constitutes the principal place of abode for Japanese, and erected defence work at two points therein.

On the other hand, following the withdrawal of the Northern troops from Tsinan on April 30th, the Southern troops began to arrive on May 1st in large numbers. By May 2nd the number of the Chinese troops in the Foreign Quarter and within the Walled City had exceeded 70,000.

General Chiang Kai-shek, Commander-in-Chief of the Southern Army, who arrived on May 2nd, proposed to the Japanese Commander that, as the Army would by all means ensure the maintenance of peace and order the Japanese troops might speedily withdraw, and the above-mentioned defence works be removed. Accordingly, the defence works were removed on the night of May 2nd, and some of the Japanese residents who had gone to places of safety returned to their homes.

b.—On May 3rd, at 9.30 a.m., the house of a Japanese by the name of Chohei Yoshifusa, was looted by regular soldiers belonging to the Southern Army. About 30 Japanese soldiers commanded by a lieutenant hastened to the scene. The plundering Chinese soldiers had fled to the neighbouring barracks. From these barracks they fired on the Japanese soldiers, some of whom were wounded. The Japanese then responded to the fire.

On the outbreak of this collision, the Southern troops, with which Tsinan was crowded at the time, almost simultaneously

began, at various points, to fire on the Japanese troops, to massacre the Japanese residents and to plunder Japanese houses.

c.—The Japanese troops endeavoured to afford shelter and protection to the Japanese residents, and also to drive the Southern troops out of the Foreign Quarter or to disarm them.

In the face of much danger the Japanese Consul contrived on several occasions to get into touch with the Chinese, and endeavored to bring about the suspension of hostilities. As, however, the Chinese troops continued firing, probably because the orders of General Chiang Kai-shek to the contrary were not obeyed, hostilities were not discontinued until the afternoon of the 5th.

Crisis Arises

d.—At that time, 4,000 Chinese troops still remained within the Walled City of Tsinan, while the number of those in the neighbourhood ran into tens of thousands. They dug trenches round the Foreign Quarter. On the neighbouring hills guns were in process of being placed in position, directed on Tsinan.

If hostilities had been permitted to be opened by the Chinese in such circumstances the Japanese troops and residents would have been placed in extreme jeopardy. It was, therefore, absolutely necessary for the Japanese troops charged with the protection of the Japanese residents to force the armed Chinese troops to leave Tsinan and the Shantung Railway without delay. On the 7th at 4 p.m., the Chief Staff Officer of the Japanese troops demanded that the Chinese troops should withdraw to a limit of 20 Chinese-miles (i.e. about 7 English-miles) from Tsinan and from either side of the Shantung Railway. He also demanded the disarming of the Chinese troops who had committed outrages on the Japanese troops and residents, and the punishment of the responsible officers. A reply was to be given within 12 hours.

Not only did the Chinese fail to comply with the demand, but their troops assumed an even more threatening attitude. On the 8th, the Japanese troops set about clearing the locality. By the 9th they had driven the Chinese troops around Tsinan to points outside the approximate limit of 20 Chinese-miles.

e.—On the other hand, the Chinese troops within the Walled City of Tsinan, including "un-uniformed soldiers," kept firing on the Japanese troops and on the Shantung Railway trains. On the afternoon of the 8th the Japanese troops endeavoured to disarm them by pacific means, but they would not be persuaded.

In consequence, early in the morning of the 9th, the Japanese troops bombarded the points d'appui of the Chinese troops, such as the offices, within the Walled City, of the Tuchun (Military Governor of the Province) and of the Taoyin (District Governor) and the Walls, and at the same time took all possible means to induce the Chinese troops to get away and escape. As a result, early in the morning of the 11th, the greater number of the Chinese troops changed into plain clothes and escaped from within the Walls. Thus, except for the "un-uniformed soldiers" in ambush, the Chinese troops were driven outside the 20 Chinese-mile limit.

f.—According to particulars ascertained up to May 15th, 14 of the Japanese residents were killed by Chinese troops in the present disturbance. Most of their bodies (including those of women) bore marks of having been subjected to inconceivably brutal acts of the most revolting character. Fifteen others were wounded. Various men and women were subjected to indescribable insults before the public gaze. The number of the Japanese houses looted is 131.

g.—With regard to the story of the alleged murder of Mr. Tsai Kung-shih, "Shantung Commissioner for Foreign Affairs," and of the members of his staff, which is bruited abroad by the Chinese, it may be remarked that, on the outbreak of the disturbance on May 3rd, the Chinese troops and "un-uniformed soldiers" fired indiscriminately at the Japanese, whether soldiers or civilians, from within all and any buildings where they could find a foothold. In fact, their fire from the Commissioner's Office (which was not known to be such by the Japanese troops engaged in fighting in that quarter) killed two Japanese soldiers. In the evening of the same day, part of the Japanese troops went on patrol. Over a dozen Chinese, who were lurking inside the Commissioner's Office, suddenly opened fire on these Japanese soldiers, who could not but respond to the fire and overpower them. Whether these included Mr. Tsai is not known.

It need scarcely be stated, however, that the Japanese troops would never in any case kill a single non-resisting Chinese citizen. Still less need it be said that the allegation regarding the "cutting off of nose and ears" is simply impossible, from the very nature of the character and habits of the Japanese people

In the statement issued on July 19 Japan's position is explained about the settlement of the Tsinan affair and the evacuation of the troops. It is to the effect that the Imperial Government has decided to settle the affair through diplomatic negotiations and on the basis of four conditions, namely, an apology from the Nationalist Government, the punishment of those responsible for the incident, the payment of an indemnity and a guarantee of future security; that as there are still raids in the Tsinan region by un-uniformed soldiers and therefore impossible to withdraw the expeditionary troops altogether the Imperial Government intends to reduce them by degrees. Already about 7,000 troops have been withdrawn from the Shantung and Peking-Tientsin regions not to speak of the return to the bases at home of the warships detailed to Chinese coast immediately after the Tsinan affair. On July 20 the Shantung troops under Gen. Ku Chen came into collision with the Japanese regulars in the Railway zone when the latter had 7 killed and 23 wounded while the Chinese left 600 bodies behind.—Ed. J. Y. B.

SUPPLEMENT TO ANGLO-JAPANESE TREATY

The Anglo-Japanese Treaty of Commerce and Navigation, concluded in 1911, was to expire on July 16, 1923, but remains in force pending the conclusion of a new treaty to replace it. Meanwhile a supplementary agreement to the said treaty was

arranged between the two countries in London on July 30, 1925, by which Article 21 of the old treaty was abolished and substituted by a new clause. The text of the said supplementary agreement was formally ratified in June 1927 and promulgated on July 4 the same year, it taking effect from the date of the exchange of ratifications and remaining in force for 5 years from that date. (For details vide Chap. on Diplomacy, 1928 edition.—Ed. J. Y. B.)

Japan and Mr. Kellogg's anti-War Pact

Japan has unconditionally seconded the draft contents of the anti-War Pact submitted to the five big powers (Great Britain, France, Italy, Germany and Japan) and nine other countries on June 23 '28 by the U.S. Secretary of State Mr. Kellogg, and Count Y. Uchida, Privy Councillor and ex-Foreign Minister, was despatched to Paris in June as Japan's plenipotentiary delegate to sign the pact.

New Treaty with Germany

To replace the old treaty which was nullified on account of the war of 1914, a new treaty of commerce and navigation was concluded between Japan and Germany in Tokyo on July 20 '27, the exchange of its ratification being concluded on April 5, 1928. The text of the new pact which took effect after 2 weeks from the date of the exchange of ratification is omitted here.

Other New Treaties Arranged or Negotiated

A new provisional commercial treaty relating to the commercial and other rights of Japanese subjects in French Indo-China was concluded between Japan and France in August '27 and is expected to take effect pending ratification. Following the ratification of the new Japan and German treaty in April '28 the new fishery convention between Japan and the Union of Soviet Socialist Republics concluded and signed in Moscow on January 23 was ratified in Tokyo on May 22 the same year. A provisional agreement assuring the most favored nation treatment on the basis of mutual reciprocity between Japan and New Zealand was also arranged between the two countries in July '28, the measure taking effect on August 8. Japan has also arranged new treaties of commerce or of amity with Bulgaria, Persia, Egypt, Ethiopia and Latvia. Parleys for the conclusion or revision of treaties are also in progress with France, Italy, Bolivia, Uruguay, Paraguay, etc. since '27. It may be added that in accordance with an agreement arranged in January '28 concerning the exchange of diplomatic representatives between Japan and Canada a Japanese legation was established at Ottawa on July 20 the same year.

Japan and the League of Nations

Japan's position as a member of the League of Nations is seriously at a disadvantage owing to the fact that the United States and Soviet Russia, Japan's neighbors, are not its members.

Anyhow, as a member from the first, Japan has been successively represented in the Council and the Assembly by Viscount Ishii, Baron Matsui and Ambassador Dr. Adachi, while at present, Dr. Yotaro Sugimura, as successor to Dr. Inazo Nitobe, occupies the post of Vice-Chief in the Secretariat of the League at Geneva. At home a special section has been established in the Foreign Office to attend to the affairs relating to the League.

Then with the object of propagating the ideal of the League and supporting its work the League of Nations Association of Japan was organized in Tokyo in April 1920, and already its roll of membership numbers about 5,000, the annual expenditure of the association reaching ¥100,000. (Hon. Pres., Prince I. Tokugawa and Pres. Viscount E. Shibusawa).

With the extension of the sphere of activities of the League as to embrace such fundamental problems as international economic conference, arbitration and safety question, etc., and with the coming forward of the United States, Soviet Russia and other powers outside the League to support its cause, the Secretariat of the League established in 1923 the Far Eastern Epidemiological Intelligence Bureau in Singapore for collecting and distributing reports concerning the prevention of epidemics in the Far Eastern countries with Japan as centre. The creation in 1926 of a branch office in Tokyo of the Intelligence Bureau at Geneva may also be mentioned to demonstrate how Japan, though situated in Far Eastern corner, is doing her best to advance the cause of the League. The Chief of the Tokyo branch office is Setsuichi Aoki.

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Counsellor Albert Sergysels.

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2nd Secretary—Ed. Machado, Jr.; Naval Attache—Capt. de Fregate Carlos Augusto Gaston Lavigne.

France. 1, Iida-machi Ichome, Kojimachi-ku. (Tel. Kudan 23)
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Counsellor M. Francois Gentil.

3rd Secretary—Jean Dobler; Attache d'Ambassador J. Baelen; 1st Interpreter—Georges Bonmarchand; Secretary—Francois Guezennec; Attache Chiffreur—J. Lortat-Jacob; Eleve-Interpreter—Denis Joly; Commercial Attache—R. Royer; Naval Attache—Capt. de Fregate Rosati; Military Attache—Lt.-Col. Renondeau.

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Counsellor Cecil Francis Joseph Dormer.

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Kobe...Armand Hauchecorne
(C.)
Nagasaki.....Vachier (C.A.)
Keijo.....Germain (C.A.)

Germany:

Yokohama..R. Buttmann (C.)
Kobe..Dr. E. Ohrt (C.G.); Dr.
Bischoff (C.); Count Strach-
witz (V.C.)
Seoul.....Jigges (C.)
DairenDirks (C.)

Great Britain:

Yokohama E. H. Holmes (C.G.);
H. A. Graves (A.V.C.)
Kobe..W. Massy Royds (C.G.)
Nagasaki..C. H. Archer (A.C.)

Tokyo...P. D. Butler (A.C.)

Osaka...R. L. Cowley (A.C.)

Tansui....G. P. Paton (C.)

Seoul..Oswald White (C.G.);

D. W. Kermode (A.V.C.)

Dairen...M. E. Denning (A.C.)

Manila T. J. Harrington (C.G.)

Honolulu G. H. Phipps (A.C.)

Greece:

Yokohama K. Nakamoto (A.C.)

Kobe..Hamish C. MacNaugh-
ton (C.)

Honduras:

Tokyo....Kei-ichi Ito (H.C.)

Italy:

Yokohama A. de Propero (C.)

Kobe...Alfonso Gasco (C.G.)

Nagasaki.....Paske Smith

Seoul...V. L. P. Fowkee (C.)

Mexico:

Yokohama....Gustavo Luders
de Negri (C.G.)

Tokyo....Kei-ichi Ito (C.H.)

Kobe.....David Latuf (C.H.)

Netherlands:

Yokohama....M. S. Wiersum
(V.C.)

Kobe...W. H. de Roos (A.C.)

Nagasaki..A. R. Ovens (A.V.C.)

Taihoku..P. C. Nicholls (V.C.)

Dairen..W. H. Winning (V.C.)

Seoul.....E. Gallois (V.C.)

Nagoya....S. Ishihara (V.C.)

Norway:

Yokohama.....R. Groff (C.)

Tokyo...Johan Brandt (V.C.)

Kobe..B. Owrum Andresen (C.)

Shimonoseki

Robert Mackenzie (V.C.)

Nagasaki...S. A. Ringer (C.)

Peru:

Yokohama....Moh Francisco
a Loyaza (C.G.)

Kobe..Don Eleo. Ronillon (C.)

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Kobe.....Francisco da
Silva e Sousa (C.)

Nagasaki..S. A. Ringer (V.C.)

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Kyoto.....K. Inabata (V.C.)

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Nagoya.....M. Ito (V.C.)

Rumania:

Osaka.....K. Inabata (C.G.)

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Tokyo.....Constantin Ligsby
(C.G.)
Kobe.....A. Askoff (C.G.)
Tsuruga.....D. Kiseleff (C.)
Hakodate....A. Loginoff (C.)
Keijo (Seoul)
John Tchitchaef (C.G.)
Otaru....N. Lubimoff (V.C.)
Dairen...Anatole Kolesnikoff
(C.)

Siam:

Osaka.....I. Azumi (H.C.)

Spain:

Yokohama & Tokyo
Juan Planas (V.C.)
Kobe
Manuel de la Escosura (C.);
Joaquin Mustaros (V.C.)

Sweden:

Yokohama..O. D. Strome (C.)
Kobe & Osaka
H. W. A. Ouchterlony (C.)
Nagasaki F. E. Ringer (A.V.C.)
Dairen..W. H. Winning (C.)
Shimonoseki & Moji
R. McKenzie (V.C.)

U. S. A.

Yokohama..Graham H. Kemper (C.); Leonard N. Green (C.); William T. Turner (V.C.); Russel B. Jordan (V.C.) (absent).

Tokyo..Leo D. Sturgeon (C.); Charles L. DeVault (C.); H. Merrell Benninghoff (V.C.)

Kobe..Erle R. Diekover (C.); George J. Haering (V.C.); Whitney Young (V.C.); Sheridan Talbott (V.C.); Otis W. Rhoades (V.C.)

Nagasaki...Henry B. Hitchcock (C.)
Nagoya....Austin R. Preston (V.C.)

Dairen..William R. Langdon (C.)

Keijo.....Ransford S. Miller (C.G.)

Taihoku...William F. Nason (V.C.)

Venezuela:

Tokyo.....B. Hattori (H.C.)

N.B.—H.C.—Honorary Consul. C.G.—Consul-General. C.—Consul. V.C.—Vice-Consul. H.V.C.—Honorary Vice-Consul. A.C.—Acting Consul. C.A.—Consular Agent.

Japanese Embassies Abroad

Belgium (Embassy at Brussels). No. 1, Boulevard Militaire, Bruxelles.

Ambassador Matsuzo Nagai.

1st Secretaries—T. Kurihara, S. Sakuma; 2nd Secretary—T. Harima; 3rd Secretary—F. Minoda; Junior Secretary—T. Takazawa.

Brazil (Embassy at Rio de Janeiro). Rua dos Voluntarios da Patria, 166.

Ambassador A. Ariyoshi.

Counsellor

1st Secretaries—R. Noda, E. Nulta; 2nd Secretary (& Consul)—K. Ichige; 3rd Secretary—T. Tsukamoto; 1st Interpreter—S. Hayao; Naval Attache—Com. S. Koike.

France (Embassy at Paris). 9, Rue La Perouse, Paris.

Ambassador Dr. Mineichiro Adachi.

Counsellor H. Kawai.

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Germany (Embassy at Berlin). Hildebrand Strasse 25, Berlin.

Ambassador Dr. S. Nagaoka.

Counsellor A. Shigemitsu.

1st Secretaries—T. Shiratori; J. Matsumiya; 2nd Secretaries—S. Yoshizawa, E. Fukada; 3rd Secretaries—H. Ashino, R. Suzuki, I. Kameyama; Commercial Secretary—A. Nagai; Military Attache—Major-Gen. Y. Omura; Naval Attache—Capt. T. Hattori.

Great Britain (Embassy at London). 37, Portman Square, London, W.1.

Ambassador Tsuneo Matsudaira.

Counsellor S. Saburi.

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Italy (Embassy at Rome). 49, Piazza del Gesu, Rome.

Ambassador Dr. D. Matsuda.

Counsellor T. Okamoto.

3rd Secretaries—M. Kajima, J. Machida; 1st Interpreter—S. Inouye; Military Attache—Lt.-Col. M. Okada; Naval Attache—Com. N. Inouye.

Soviet Russia (Embassy at Moscow). Hotel Savoy, Moscow.

Ambassador T. Tanaka.

1st Secretary—H. Sako; 2nd Secretaries—F. Sugishita, M. Shimada, K. Sasaki, F. Miyakawa; 3rd Secretary—S. Naruse; Commercial Secretary—K. Kawatani; Junior Secretary—Y. Koyanagi; Military Attache—Lt.-Col. M. Komatsubara; Naval Attache—Com. K. Koyanagi.

Turkey (Embassy at Constantinople). No. 22 & 24 Rue Djilhangbir, Pera.

Ambassador T. Obata.

Counsellor H. Futagame.

1st Secretary—H. Ashida; 3rd Secretary—N. Watanabe; Commercial Secretary—S. Moto; Junior Secretary—U. Mune-mura; 1st Interpreter—T. Naito; Military Attache—Major K. Hashimoto.

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Ambassador Katsuji Debuchi.

Counsellor S. Sawada.

1st Secretaries—S. Togo, M. Tani; 2nd Secretaries—G. Morishima, T. Sa'o; 3rd Secretaries—K. Hori, K. Tsurumi, K. Maki; Commercial Secretaries—M. Hara, Y. Sudo; Military Attache—Col. H. Sado; Naval Attache—Capt. T. Sakano.

Japanese Legations Abroad**Argentina, Paraguay & Uruguay (Legation at Buenos Aires). Casilla No. 607.**

Minister J. Yamazaki.

1st Secretary (& Consul)—S. Koshida; Commercial Secretary—T. Ishii; Military Attache—Major Y. Inouye.

Austria & Hungary (Legation at Vienna). Reissner Strasse III, 51 Wien.

Minister M. Ohno.

3rd Secretaries—N. Mikuriya, M. Arakawa, D. Kato; Military Attache—Lt.-Col. H. Yamashita.

Czechoslovakia (Legation at Prague). Malteske Nam. No. 6.

Minister E. Kimura.

2nd Secretary Y. Nagata.

Chili & Bolivia (Legation at Santiago). No. 398, Avenida de la Republica.

Minister Y. Mori.

1st Secretary—M. Kitada; 1st Interpreter—Y. Kitazawa; Military Attache—Maj. S. Fujita; Naval Attache—Lt.-Com. K. Ikeda.

China (Legation at Peking). Legation Quarter, Peking.

Minister K. Yoshizawa.

Counsellor (Emb.) Y. Hori.

1st Secretary—E. Amaha; 2nd Secretaries—N. Iwamura, Y. Suma; 3rd Secretaries—A. Omi, Y. Tsuchida, T. Takatsu; Commercial Counsellor—H. Yokotake; Junior Secretary—M. Seino; 1st Interpreter—M. Arino; 2nd Interpreter—R. Harada; Military Attache—Maj.-Gen. Y. Tatekawa; Naval Attache—Capt. T. Sugisaka.

Greece (Legation at Athens). No. 23, Avenue Kifissias.

Minister S. Kawashima.

2nd Secretaries C. Miyakoshi, S. Kato.

Latvia.

Minister Dr. S. Nagaoka
(Amb. to Germany)

Military Attache Colonel S. Suzuki.

Luxemburg.

Minister M. Nagai (Amb. to Belgium).

Mexico (Legation at Mexico City). 1a Calle de Sinaloa.

Minister A. Aoki.

2nd Secretary—T. Kumabe; 1st Interpreter—M. Yodogawa; Military Attache—Major Y. Wada; Naval Attache—Com. S. Takeshita.

Netherlands (Legation at Hague). Bezuidenhoutscheweg 87, La Hage, Pays Bas.

Minister K. Hirota.

2nd Secretary—M. Otaka; 3rd Secretary—T. Yoshida.

Peru (Legation at Lima). Lima, Peru.

Minister K. Yamazaki.

1st Secretary (& Consul)—Z. Amari; 1st Interpreters—Y. Otani, S. Endo.

Poland (Legation at Warsaw). No. 10 Foksal, Varsovie (Warsaw).

Minister H. Matsushima.

3rd Secretary—S. Chiba; Military Attache—Col. S. Suzuki.

Rumania & Yugoslavia (Serb-Croate-Slovene) (Legation at Bukharest). Strada Atenel 25, Bucarest.

Minister

2nd Secretary—T. Harima; 3rd Secretary—H. Kano.

Siam (Legation at Bangkok). Surawongse Road, Bangkok.

- Minister Y. Yatabe.
 3rd Secretary (& Consul).... K. Gunji.
- Spain & Portugal** (Legation at Madrid). Aleala, 103, Madrid.
 Minister T. Ota.
 2nd Secretaries—K. Arai; G. Omori; 3rd Secretary—K. Motono;
 2nd Interpreter—T. Komine.
- Sweden, Norway, Denmark & Finland** (Legation at Stockholm).
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 Minister Vis. K. Mushakoji.
 1st Secretary—S. Uyeda; 2nd Secretary—K. Yanagisawa; 3rd
 Secretaries—Z. Machida, T. Ito; 1st Interpreters—T. Gunji,
 M. Hirata; Military Attache—Col. K. Mike; Naval Attache
 —Com. S. Inouye.
- Switzerland** (Legation at Berne). Bundesgasse 20, Berne.
 Minister I. Yoshida.
 2nd Secretary—T. Amagi; 3rd Secretaries—T. Sato, Baron K.
 Fujii, Military Attache—Maj. T. Nagata.

REPRESENTATIVES TO THE LEAGUE OF NATIONS

Japanese Office of the League of Nations

(Paris & Geneva)

- Chief Min. Plen. N. Sato.
 Deputy Chief Emb. Counsellor J. Ito.
 Secretaries—2nd Emb. Sec. S. Hidaka, 3rd Emb. Sec. T. Sakamoto, S. Kadowaki.

Japanese Office of the International Labor Organization

- Dir. of Int. Labor Board..... A. Kasama.
 Secretary Y. Sakurai.

Japanese Representatives to the League of Nations

Consultative Committee for Army, Navy & Air Problems

- Army Maj.-Gen. B. Kaba.
 Navy & Air..... Rear-Adm. Vis. T. Kato.

Japanese Consulates Abroad

- | | |
|------------------------------|-------------------------------|
| China. | Chientao .....(G) Y. Suzuki. |
| Amoy.....T. Sakamoto. | Chungching (V) R. Goto (act.) |
| Antung.....K. Okada. | Fuchou....(G) Y. Nishizawa. |
| Canton.....(G.) S. Yano. | Hangchow.....C. Kiyono. |
| Chang-Chia-Kou S. Yamazaki. | Hankow...(G) K. Kuwajima. |
| Changchun.....K. Nagai | Harbin.....(G) G. Yagi. |
| Changsha .....R. Kasuya. | Hongkong..(G) Y. Murakami. |
| Chefoo.....S. Morioka. | Hunchun (Branch) H. Higashi. |
| Chengchiatun.....J. Mayeda. | Ichang (V) M. Urakawa (act.) |
| Cheng'u | Kirin.....(G) S. Kawagoye. |
| (C) U. Kurematsu (act.) | Kiukiang.....Y. Owaku. |
| Chiefeng... N. Nakane (act.) | Liaoyang.....J. Mayeda. |

169:

Alexandria (G) M. Yokoyama.

N.B.—(G)=Consul-General. (V)=
Vice-Consul (act.)=Act-
ing Consul or Acting
Vice-Consul.

Liege.....Armand B. Magis

- Bolivia.**
Lapay...Victor Munoz Reyes.
- Brazil.**
Manaos.....A. de Aruglo.
- Chili.**
Iquique.....Don H. Mujica.
- Columbia.**
Bogota..Don Luis C. Corral.
- Czechoslovakia.**
Braba.....Hans Reiser.
- Denmark.**
Copenhagen..A. N. Peterson.
- Ecuador.**
Guayaquil...Pedro V. Miller.
- France.**
Bordeaux.....E. G. Faure.
Paris.....C. Laurent.
Algeria:....P. M. A. Ferrat.
Beyrout (Syria)..E. Soubret.
Le Havre....C. F. Longstaff.
Tunis....Jules Charles Prat.
- Germany.**
Aachen.....W. A. Lieven.
Bremen.....F. H. Noltenius.
Koln.....Heinrich Maus.
Leipzig.....Alfred Selter.
Muenchen
Eduard Schussel (G).
Stettin.....A. Kunstmann
- Great Britain.**
Cardiff.....E. H. Trimby.
Dublin.....A. M. Weatherill.
Durban (S.A.)..W. R. Wright.
Gibraltar.....W. H. Smith.
Glasgow....A. Scott Younger.
Manchester....W. P. Groves.
Middlesborough....W. Dixon.
Valetta (Malta)..R. Howard.
- Holland.**
Amsterdam
Baron S. de L. Wyborgh.
- Rotterdam..H. P. Van Vliet.**
- Hungary.**
Budapest.....W. Prohle.
- Italy.**
Genoa.....L. Canali (V).
Livouorne
Comte G. de Chayes.
Naples
Marques C. E. Capomazza.
Palermo.....Alfredo Follina.
VeniceG. Fusinato.
- Luxemburg.**
Jean Pierre Arendt.
- New Zealand.**
Auckland....A. B. Robertson.
Wellington ...Arthur Young.
- Norway.**
Oslo.....A. H. Mathlesen.
- Peru.**
Trujillo.Carlos Larco Herrera.
- Portugal.**
Lisbon.....Carlos Gomes.
Oporto...Jose Augusto Dias.
- Spain.**
Barcelona.....G. D. Lauger.
- Sweden.**
Gottenburg..Carl O. Kjelberg.
- Switzerland.**
Geneva.....Alfred Kern.
Zurich.....Ernest Voegell.
- Greece.**
Salonica...Edwin N. Saltiel.
- U.S.A.**
BostonChanning H. Cox.
Galveston.....J. H. Langben.
Juneau.....Emery Valentine.
Mobile.....H. H. Clarke.
Philadelphia J. F. MacFadden.
St. Louis.....J. E. Smith.
- N.B.—G. = Consul-General. V. = Vice-Consul.

CHAPTER IX

THE ARMY, NAVY AND AVIATION

INTRODUCTORY REMARKS

Relative Position of Army and Navy

Till the time of the Russo-Japanese war the Army held a position of supreme importance as compared with the Navy. In the organization of the Imperial Headquarters on the occasion of the Japan-China war, for instance, the Chief of the General Staff, a General in the Army, controlled for strategical reasons the two wings of national defence, though they had been distinctly separated in 1893. In the Imperial Headquarters organized at the time of the Russo-Japanese war, the Chiefs of the two services were for the first time placed on equal status as to power, and were placed under the direct control of the Emperor. Since then, so far as expansion is concerned, the Navy has surpassed the Army in the amount voted by the Imperial Diet.

National Defence Program

Upon the restoration of peace after the Russo-Japanese war, Prince Yamagata memorialized the Throne, suggesting that the Army should be increased to twenty-five Divisions in the future, namely in the first term to nineteen Divisions and in the second term to twenty-five Divisions, while the Navy should be expanded to two Squadrons, each consisting of at least eight superior battleships, and of some cruiser squadrons. The project was sanctioned by the Emperor, and the then Saionji Cabinet promised that the scheme would be carried out as far as the State finances allowed. The national defence program, however, has naturally been modified by the result of the Washington Conference, for which see later.

The Board of Marshals and Fleet Admirals

The Board of Marshals and Fleet Admirals was created in 1898 as the highest advisory body on military and naval matters to the Emperor. The present members are:

Admiral of Fleet Count Togo; Marshal Count Oku; Admiral of Fleet Visc. Inouye; H.I.H. Marshal Prince Kan-in; Marshal Visc. Uyehara.

The Supreme Council of War

This is a special war office that was created in the year 1887 and may be regarded as the Emperor's advisers and staff officers on all important matters pertaining to war. The members consist of those of above Office, Ministers of War and the Navy, Chiefs of the General Staff and of the Naval Staff Board, all

as ex officio members, and also those specially nominated by the Emperor. At present the specially nominated members of the Council are:—

H.I.H. Gen. Prince Kuni; H.I.H. Gen. Prince Nashimoto; H.I.H. Adm. Prince Fushimi; Adm. Yamashita; Adm. Takeshita; Adm. Takarabe; Adm. Baron Abo; Gen. Ugaki; Gen. Muto; Gen. Inouye; Gen. Suzuki; Gen. K. Tanaka.

The Court-Martial Law

The new Court-Martial Law passed by the 44th session of the Diet in March 1921 which came into force on April 1st, 1922, is improved in many respects, in keeping with the spirit of the times.

According to the provisions of the new law there are in the Army eight court-martials, i.e., the High, the Divisional and six other temporary ones, while the Navy has the High, the Tokyo, the Admiralty and four other temporary ones. In both services the court-martial is composed of judges (military or naval officers), law officers (civil) and clerks, the number of these varying according to the nature of the court.

The points of improvement effected in the new enactment are (1) all offences committed by officers and men shall be tried in public, (2) and the accused are allowed to have the benefit of counsel in their defence. The defending lawyers are selected from among those appointed by the Minister of War. A way was opened for appeal against judgements. In the new law the examining body includes legal experts.

Two Notable Cases.—The first notable trial by court-martial under the new law was held at Kumamoto, (6th Army Division), Oct. 14 to 20, 1922, over the notorious wrongful disposal of Czech Arms at Vladivostok. Major J. Hara in charge of the arms at the time was found guilty and was sentenced to penal servitude for 1½ years. The second was the Osugi murder case by a Gendarmerie Captain at the time of the Sept. disaster 1923 in Tokyo.

SECTION I.—THE ARMY

1. INTRODUCTORY REMARKS

From about seven centuries till the abolition of feudalism in 1868, military service was an exclusive privilege of samurai. With the advent of the resuscitated Imperial regime and, in consequence, the complete overhauling of national organizations, social, political and so forth, that privilege was converted into a burdensome duty of conscription service to which sons and brothers of all classes of people had to attend on reaching majority. Japan had adopted the Western system, that of a nation in arms. Of the Generals who rendered most distinguished service in thus organizing the military system of Japan, the names of the late Marshals Yamagata and Oyama and the late General Prince Katsura stand out prominent. The distinguished ex-Commander-in-Chief of the Manchurian Army carried out in 1884 minute investigations into the military systems of the lead-

ing Powers of Europe. As a result of his memorable tour of inspection the military organization of the country was remodelled on the Prussian system. The Marshal's suite contained the best talents of the time so far as military affairs were concerned and included the late General Kawakami, Chief of the General Staff, and the late Prince Katsura. It was by the General, who by the way died soon after the close of the Japan-China war in which he played the most distinguished part, that the staff service of the country was laid on the present basis of perfection and efficiency. On the other hand General Katsura did much to improve the administrative side of the service. In acclimatizing the German method Japan owed much to the late General Meckel of the Prussian army who came to this country in 1885 as adviser to the Japanese army and took under his tutelage most of our distinguished Generals.

2. CONSCRIPTION

The conscription system, first elaborated in 1873 and lastly revised in 1927, requires all able-bodied Japanese males of from full 17 to 40 years old to respond to the nation's call. In practice, that fundamental principle has never been put in force, and even on such an extraordinary occasion as that of the 1904-5 War the call was limited to a portion of those on the second reserve.

The service is divided as follows:—*Jobi hei-eki* (standing army) consisting of *gen-eki* (active service) and *yobi-eki* (1st reserve service); *kobi hei-eki* (2nd reserve service); *hoju hei-eki* (territorial army service); *kokumin hei-eki* (national army service). The youths at full 20 years of age are subject to examination for conscription. Those who pass it as Class I are enrolled by lottery in the active service which extends 2 years (3 years in the navy) or 1st or 2nd territorial army service. Lads who finish the active service are placed on the 1st reserve list for 5 years and 4 months (4 years in the navy) at the end of which they are transferred to the 2nd reserve for 10 years (5 years in the navy), and finally, after 17 years and 4 months (12 years in the navy) of service, on the national army. Those who have gone through the period of territorial army service also pass into the national army. Youths who are classed as II are not recruited, but placed on the national army service.

Exemption and Postponement.—Those who are classed as III are exempted from service, while IV Class lads are to be examined again the following year and, if they remain in the same class after repeated examinations, are exempted. Criminals and the only supporters of the family have their enlistment put off. Postponement of the enlistment is allowed in favor of lads studying at schools, Government or private, which are recognized to be of a status at least equal to that of Middle Schools till they reach 27 years of age according to the length of the terms of schools they attend. Such boys are subject to conscription examination when they cease to attend schools. This postponement is also applicable to those staying abroad except in near Asiatic countries, to the age of 37. On the other hand, a student living within the eligible limit is enrolled at once in the service without the favor of chance of exemption from active service incidental to the draw.

ing of lots, as soon as he leaves a school placed under the postponement clause, or when he reaches the above ages.

Short Term Active Service.—Under the new conscription law enforced Dec. 1, 1927, the term of active service of those conscripts who finished the course of the Seinen Kunrensho (schools for military training of young men) has been reduced to 18 months, while that of the graduates of normal schools has been shortened to 5 months. The system of this short term active service has also been adopted in the Navy with the object to spread the thoughts concerning maritime affairs (maritime knowledge). The term of active service for the students of middle schools and higher grade schools who underwent the course of military training at schools has been reduced to 12 months for the graduates of middle grade schools and 10 months for those of higher grade schools. The former system of one year volunteers was discontinued after Nov. 30, '27.

While, under the old system the students matriculating in schools were exempted from occasional calls merely, the conscription examination of those students is to be postponed under the new measure till they reach the age of full 27 years.

Examination for Conscription.—Lads of conscript age are classified into 5 grades as regards their physical examination, as, A, B1, B2, C, D, E, the respective figures in the 1927 examination being as follows:—

Total No.	A Grade	B1 Grade	B2 Grade	C Grade	D Grade	E Grade
581,307	197,887	70,006	127,310	162,911	22,549	644

Statistics on stature and weight ascertained through physical examination for three years ending 1926 makes the following showing:

Stature

	Above 5.6 shaku	5.3—5.6 shaku	5.0—5.3 shaku	Under 5.0 shaku	Disqualified	Average stature
1924	19,249	201,367	254,865	83,370	2,991	5.26
1925	18,743	197,445	260,319	42,482	3,002	5.26
1926	19,638	202,319	255,620	36,596	3,061	5.26

Weight

	Above 5.6 shaku Kwan	5.3—5.6 shaku Kwan	5.0—5.3 shaku Kwan	Under 5.0 shaku Kwan	Average weight Kwan
1924	15.949	14.894	13.432	12.103	13.963
1925	15.821	14.705	12.971	12.022	13.827
1926	15.986	14.868	13.446	12.138	14.001

The ratio of illiteracy was 4.28 per cent. in 1910, 3.44 in '11 and 2.17 in '15, but it was reduced to 0.94 in '23, 0.90 in '24 and 0.88 in '25.

Conscripts and Their Leave of Absence

In order to meet the convenience of the families of conscripts the military authorities have decided to adopt a new departure.

According to this conscripts may return home to assist the business of their families at a convenient period, staying for the number of days representing their leave, but in no case for more than a fortnight. The proposal was carried into effect in 1919.

3. PERSONNEL OF ACTIVE SERVICE

Officers.—Infantry, cavalry, artillery, engineer and commissariat officers are appointed from among cadets trained at the Military Cadets' School, or non-commissioned officers. Technical officers, surgeons and veterinary surgeons are promoted from among probational officers who must be graduates of universities and technical or medical schools, while for paymasters officers of other arms are trained at the Paymasters' School. Officers can also volunteer for the gendarmerie when they are put to training at the Gendarmerie Training Institute.

Warrant officers.—These are special sergeant-majors.

Non-Commissioned officers.—Comprise sergeant-majors, sergeants and corporals, all to be promoted from the ranks of the privates.

Privates.—Are classified into senior, 1st and 2nd classes.

Promotion and Age-Limit of Officers

Rules for promotion of military officers in service in time of peace are as follows, this limit being reduced to $\frac{1}{2}$ in time of war:

1 Year from Sub-Lieutenant to Lieutenant, 2 years from Lieutenant to Captain, 4 years to Major, 2 years to Lieutenant-Colonel, 2 years each to Colonel and next to Major-General, 3 years to Lieutenant-General. The promotion to full General and next to Marshal is left to the will of the Emperor.

Age-limit in the active service is,—for Sub-Lieutenant and Lieutenant 44, Captain 48, Major 50, Lieutenant-Colonel 53, Colonel 55, Major-General 58, Lieutenant-General 62, General 65, and no limit for Marshal.

Opening the Door of the Service

To induce non-commissioned officers to remain in the service, the military authorities devised in 1920 a special system by which the warrant officer of capability may be promoted to a special lieutenant after a short education, to be elevated according to merit to a higher post, even to the supreme Marshalship. On the other hand, to reinforce the Army with erudite officers, the graduates of universities in science or engineering can now be appointed by the Appointment Regulations of Technical Officers gazetted in August 1919, to Engineering or Artillery Lieutenants after 6 months' cadetship, while those graduated from the

medical and agricultural colleges are likewise qualified to become Surgeon and Veterinary Lieutenants respectively.

No. of Officers on Active List

	Dec. 1926
Gen. to Maj.-Gen. and ranking officers.....	209
Col. to Maj. and ranking officers.....	3,229
Capt. to Sub-Lieut. and ranking officers.....	10,294
Non-commissioned officers	22,781
Total	36,513
Do. for 1924.....	38,028
Do. for 1925.....	37,208

Besides, there were 8,269 gendarmes at the end of 1926.

4. THE ARMY EDUCATION

Military education is organized as follows:—(1) The Military Preparatory Schools located at Tokyo, Hiroshima and Kumamoto are the lowest ladder in the scale of education for candidates aspiring to become officers. (2) The Military Cadets' School situated at Tokyo receives the graduates of the Preparatory Schools and other candidates. (3) The Staff College gives the finishing polish to lieutenants and captains of promising ability and gives necessary training so as to qualify them to become staff officers.

For the benefit of those aspiring to become non-commissioned officers, military training schools were established at Sendai, Toyohashi and Kumamoto in 1927, each school accommodating 600. At the same time Military Preparatory Schools at Kumamoto and Sendai were abolished.

Besides the above there are various schools to give special education connected with Army. These are:—the Artillery and Engineering School for 2nd lieutenants of the respective corps to receive necessary training; the Infantry School to instruct captains and lieutenants in tactics, etc.; the Toyama Military School to give officers and non-commissioned officers from two to seven months' training in gymnastics, and fencing, and also to train the Military Band; the Cavalry School to give eleven months' training to officers and non-commissioned officers of cavalry; the Heavy Artillery School; Field Artillery School; Gunnery Mechanic School; Paymaster School; Surgery School; Veterinary Surgery School; the Army Engineering School for training officers and non-commissioned officers in military engineering; the Military Communication School; the Military Motor Car School; the Military Aviation Schools (3); 3 schools for training non-commissioned officers (est. in '27 at Sendai, Toyohashi & Kumamoto); the Gendarmerie Training Institute.

Latest Statistics (1928)

	Staff	Students	Graduates
Staff College	49	160	60
Art. & Eng. School.....	60	193	172
Infantry School	25	280	140
Toyama School	105	196	102
Cavalry School	37	70	108
Field Art. School.....	80	90	90
Heavy Art. School.....	36	198	198
Army Eng. School.....	35	31	—
Mil. Avi. Schools (3).....	147	270	94
Mil. Motor Car School (est. '25)	10	15	15
Mil. Communication „ (est. '25)	25	15	—
Cadets' School	207	1,257	428
Mil. Prep. Schools (2).....	29	250	50
Gun. Mech. School.....	50	283	115
Paymaster School	76	74	36
Surgery School	35	150	219
Vet. Surg. School.....	23	78	94
Aviation Schools (3).....	46	78	30
Mil. Training Schools (3).....	45	350	280
Gendarmerie Training School..	30	75	71
Land Surveying School.....	9	8	9

5. DEVELOPMENT & REORGANIZATION OF SPECIAL CORPS

As a result of actual experience learned in the 1904-5 war and the World's war, special corps have been expanded or reorganized. The development is specially conspicuous in (1) Heavy Artillery, (2) Field and Mountain Artillery, (3) Machine Gun Companies, (4) Communication Corps, (5) Flying Corps, etc.

Heavy Artillery.—This is the new term adopted for the Fortress Artillery in the old system, the Fortress Artillery formerly stationed at the forts existing at various strategic places, as Bay of Tokyo, Shimonoseki, and others, having been exclusively defensive, and therefore unsuited for aggressive operations. The new terminological change, therefore, may be called bringing the thing up to date. At the same time some marked innovation has been adopted for this branch of the service as, for instance, the unification of organization of artillery corps in strength, whereas in the former Fortress Artillery the strength of a regiment or a battalion was different in a different fortress. Next, to strengthen the efficiency and mobile power of Heavy Artillery Corps, lighter guns were attached, to be made use of when quick work is required. The Heavy Artillery Corps is as follows according to the new system:—

Regiments:—Yokosuka; Miyama; Shimonoseki.

Battalions:—Hakodate; Maizuru; Keichi; Sasebo; Masan; Port Arthur; Keelung; Mako.

Field Artillery and Mountain Artillery.—(A) A field artillery regiment, composed of three battalions, is attached to each division with the exception of the 9th and 11th Divisions for each of

which a mountain artillery regiment is provided.

(B) Besides there are four brigades of field heavy artillery, each of two regiments strength, distributed as follows:—

Brig. headquarters	Reg.	Brig. headquarters	Reg.
1st (Mishima).....	{ 2nd. 3rd.	3rd (Konodai)	{ 1st. 7th.
2nd (Kokura)	{ 5th. 6th.	4th (Tokyo)	{ 4th. 8th.

(C) Two independent mountain artillery regiments, each two battalions strong, are stationed at Takata (1st) and Kurume (3rd).

Mounted Artillery.—A mounted artillery battalion is stationed at Konodai, Chiba prefecture.

Mounted Machine Guns.—It has been decided to attach a battery of mounted machine guns to each infantry regiment, the new organization having come into effect in August, 1922.*

Balloon Corps.—A balloon corps is stationed at Tsugamura, Chiba prefecture.

Railway Regiments.—Two railway regiments are stationed at Narashino and Chiba, both in Chiba prefecture.

Telegraph Regiments.—The 1st in Tokyo, and the 2nd in Hiroshima.

Tank Corps.—A tank corps, created in '25, is stationed at Kurume and attached to the 12th division.

Anti-Air Craft Artillery.—1st anti-air craft artillery regiment, also created in '25, is stationed at Hamamatsu and attached to the 3rd division.

Motor-car Corps and Subsidy.—Motor-car corps, which was created several years ago as a special unit of the Service Corps, was abolished in April '25, in connection with the army reorganization and instead an Army Motor-car School was established at Setagaya, Tokyo. In May 1918, a law for granting bounty to motors strong enough for purposes of transportation in time of need was enacted. Rate of bounty allowed to such motor-cars is as follows:—

Capacity of motor car	For construction Yen	Extra allowance Yen	For purchase Yen	For maintenance (per day) Yen
A. $\frac{3}{4}$ metric tons and over.	1,500	500	1,000	400
B. 1.0 met. tons and over..	2,000	500	1,000	500
C. 1.5 met. tons and over..	3,000	500	1,000	600
D. $\frac{3}{4}$ met. tons and over..	1,500	375	750	300
E. 1.0 met. tons and over..	2,000	375	750	400
F. 1.5 met. tons and over..	3,000	375	750	500

N. B.—A, B and C are goods wagons while D, E and F are those whose bodies can easily be reconstructed into wagons.

The number of cars subsidized according to the Law amounted to 4 in 1918; 33 in 1919; 22 in 1920, totalling 59.

Army Air Force.—At present there are eight flying regiments (two of them in course of organization), each consisting of 3 or 4 companies. The force was made an independent ser-

vice on June 1, '25, the former term "flying battalions" having been changed into "flying regiments" at the same time. (For further details vide Section on Aviation—Ed. J.Y.B.)

6. THE ARMS DEPOT AND MILITARY ARSENALS

The Arms Depot has its headquarters in Tokyo, and branches at Tokyo, Chiba, Osaka, Nagoya, Hiroshima and Kokura. They conduct the purchase, storing, maintenance, repairs, distribution, replacement, etc. of arms and ordnance, mounting of guns and similar work. The Military Arsenals are established at Tokyo, Osaka, Nagoya and Oji (near Tokyo), each having a number of branch factories and powder magazines, with the headquarters at Kolshikawa, Tokyo. They undertake the designing, planning and manufacture of arms, ordnance, munitions of war and powder required in the army; their repairs and inspection, and also undertake the manufacture of powder and arms for the navy and the public at their request. There is besides one ordnance manufactory at Kokura and another at Haljo.

7. ARMY ON THE PEACE STANDING

Organization

A division is generally composed of 2 brigades of infantry, 1 regiment each of cavalry and artillery, 1 battalion each of engineers and army service corps. A regiment of infantry consists of 3 battalions, each 600 men, while a regiment of cavalry is composed of 3 or 4 squadrons, each 100 sabres. A regiment of field artillery consists of 6 batteries, each of 4 guns, while a battalion of engineers consists of 3 companies, each of 150 men, and that of army service corps of 300 men. There are also independent corps, as shown in the table of army distribution given in this chapter.

Peace-Footing and Expenditure

The policy of secrecy and aloofness in military affairs has been much relaxed in deference to the spirit of the times. In the 1919-20 Diet, General Tanaka, the then War Minister, for the first time took the public into confidence as to the number of officers and rank and file on peace-footing.

Average annual expenditure per capita in rank, much increased of late with higher price of commodities, stood as follows in Japan Proper in 1921-22:—

Sergeant-major, ¥633.994; sergeant, ¥430.707; corporal, ¥340.707; superior private, ¥265.744; 1st and 2nd private, ¥254.944.

Strength of the Standing Force

As the result of the army adjustment and reorganization effected twice, in 1922 and 1925, has considerably decreased the strength of standing force, which consists at present of 17 divisions with approximately 210,880 officers and men (15,340 officers and 195,540 warrant officers and men). Classified according to different corps the figure stands as follows:—

Kind	No. of Regiments (or battalions)	No. of companies (squadrons or batteries)
Infantry	70 regiments	706 companies
Cavalry	25 regiments	70 squadrons
Field artillery	15 regiments	90 batteries
Mountain artillery	4 regs, 1 bat.	22 batteries
Mounted artillery	1 bat.	2 batteries
Field heavy artillery	8 regiments	44 batteries
Heavy artillery	3 regs. 8 independent bats.	34 batteries
Sappers	17 bats.	48 companies
Railway corps	3 regiments	16 companies
Telegraph corps	2 regiments	14 companies
Flying corps	8 regiments	26 companies
Balloon corps	1 corps	2 companies
Commissariats	15 battalions	30 companies
Tank corps	1 corps	1 company
Anti-air craft artillery	1 regiment	4 companies

Distribution (As revised in April 1925)

Divisional headquarters	Brigade, Regiment, Battalion, etc. of various corps and headquarters								Garrison or corps
Imperial Body Guard Division (Tokyo)	Infantry	{ Guard Brig. 1: Tokyo...				{ Guard Regs. 1, 2			Tokyo
		{ Guard Brig. 2: Tokyo...				{ Guard Regs. 3, 4			
	Cavalry Brig. 1: Narashino ...				{ Guard F. A. Reg.			Narashino	
					{ Regs. 13, 14 ...				
	Field Heavy Art. Brig. 4 Tokyo					{ Guard Reg. ...			Tokyo
						{ Reg. 8 ...			
	Engineer Guard Bat. ; Commissariat				{ Reg. 4 ...			Shimoshizu	
	Telegraph Reg. 1				{ Guard Bat. ; ...				
1st Division (Tokyo)	Railway Reg. {	{ 1				{			Chiba
		{ 2				{			Narashino
	Flying Reg. 5				{			Tachikawa	
	Balloon Corps				{			Tokorozawa	
	Infantry {	{ Brig. 1: Tokyo				{ Reg. 49			Kofu
		{ Brig. 2: Tokyo				{ Reg. 1			Tokyo
	Cavalry Brig. 2: Narashino ...					{ Reg. 3			Sakura
						{ Reg. 57			Narashino
Field Heavy Art. Brig. 3; Konodai					{ Regs. 15, 16 ...			Tokyo	
					{ Reg. 1			Konodai	
Yokosuka Heavy Artillery Reg....				{ Field Art. Reg. 1			Yokosuka		
Eng. Bat. 1; Commissariat Bat. 1				{ Mounted Art. Bat					
				{ Field Heavy			Tokyo		
				{ Art. Regs. 1, 7					

2nd Division (Sendai)	Infantry	Brig. 3: Sendai ...	Reg. 4 ...	Sendai
			Reg. 29 ...	Wakamatsu
		Brig. 15: Takata ...	Reg. 16, Bats. 1, 2	Shibata
			Reg. 16, Bat. 3 ..	Muramatsu
3rd Division (Nagoya)	Caval. Brig. 4: Toyohashi ...	Field Art. Reg. 2; Eng. Bat. 2; Comt. Bat. 2 ...	Reg. 30 ...	Takata
				Sendai
			Independent Mountain Art. Reg. 1 ...	Takata
3rd Division (Nagoya)	Infantry	Brig. 5: Nagoya...	Reg. 6 ...	Nagoya
			Reg. 63 ...	Gifu
		Brig. 29: Shizuoka ...	Reg. 18, Bats. 1, 2	Toyohashi
			Reg. 18, Bat. 3	Hamamatsu
	Caval. Brig. 4: Toyohashi ...	Field Art. Reg. 3; Field Heavy Art. Regs. 2, 3	Reg. 34 ...	Shizuoka
			Reg. 3 ...	Nagoya
			Regs. 25, 26 ...	Toyohashi
				Nagoya
4th Division (Osaka)	Field Heavy Art. Brig. 1: Mishima	Comt. Bat. 3 ...		Mishima
				Nagoya
				Toyohashi
				Gifu
	Flying Regs. 1, 2...	Flying Reg. 7 ...		Hamamatsu
4th Division (Osaka)	Infantry	Brig. 7: Osaka ...	Reg. 8 ...	Osaka
			Reg. 70 ...	Sasayama
		Brig. 32: Wakayama...	Reg. 61 ...	Wakayama
			Reg. 37 ...	Osaka
	Caval. Reg. 4; Comt. Bat. 4 ...	Field Artillery Reg. 4 ..		Shiddayama
				Miyama
5th Division (Hiroshima)	Miyama Heavy Artillery	Engineer Bat. 4 ...		Takatsuki
	Caval. Reg. 5; Field Art. Reg. 5; Eng. Bat. 5; Comt. Bat. 5; Telegraph Reg. 2 ...			Hiroshima
6th Division (Kumamoto)	Infantry	Brig. 9: Hiroshima ...	Reg. 11 ...	Hiroshima
			Reg. 41 ...	Fukuyama
		Brig. 21: Yamaguchi...	Reg. 21 ...	Hamada
			Reg. 42 ...	Yamaguchi
	Caval. Reg. 6; Field Art. Reg. 6; Eng. Bat. 6; Comt. Bat. 6 ...			Kumamoto
7th Division (Asahikawa)	Infantry	Brig. 11: Kumamoto...	Reg. 13 ...	Kumamoto
			Reg. 47 ...	Oita
		Brig. 36: Kagoshima...	Reg. 23 ...	Miyakonojo
			Reg. 45 ...	Kagoshima
	Caval. Reg. 6; Field Art. Reg. 6; Eng. Bat. 6; Comt. Bat. 6 ...			Kumamoto
7th Division (Asahikawa)	Infantry	Brig. 13: Asahikawa...	Reg. 25 ...	Sapporo.
			Reg. 26 ...	
		Brig. 14: Asahikawa...	Regs. 27, 23 ...	Asahikawa
	Caval. Reg. 7; Field Art. Reg. 7; Eng. Bat. 7; Comt. Bat. 7 ...	Hakodate Heavy Art. Bat. ...		Hakodate
8th Division (Hiro-saki)	Infantry	Brig. 4: Hirosaki ...	Reg. 5 ...	Aomori
			Reg. 31 ...	Hirosaki
		Brig. 16: Akita ...	Reg. 17 ...	Akita
			Reg. 32 ...	Yamagata
	Field Art Reg. 8: Comt. Bat. 8...	Cavalry Brig. 3: Morioka ...		Hirosaki
				Morioka
8th Division (Hiro-saki)	Eng. Bat. 8 ...		Reg. 8 ...	Hirosaki
			Regs. 23, 24 ...	Morioka

Divisional headquarters	Brigade, Regiment, Battalion, etc. of various corps and headquarters				Garrison or corps
9th Division (Kanazawa)	Infantry	Brig. 6 : Kanazawa	...	{ Reg. 7 ...	Kanazawa
				{ Reg. 35 ...	Toyama
		Brig. 18 : Tsuruga	...	{ Reg. 19 ...	Tsuruga
	Caval. Reg. 9 : Mount. Art. Reg. 9 : Eng. Bat. 9 : Comt. Bat. 9 ...				Sabae Kanazawa
10th Division (Himeji)	Infantry	Brig. 8 : Himeji	...	{ Reg. 39 ...	Himeji
				{ Reg. 40 ...	Tottori
	Infantry	Brig. 33 : Okayama	...	{ Reg. 10 ...	Okayama
				{ Reg. 63 ...	Matsuye
	Caval. Reg. 10 ; Field Art. Reg. 10 ... Eng. Bat. 10 ... Comt. Bat. 10 ...				Himeji Okayama Himeji
11th Division (Zentsuji)	Infantry	Brig. 10 : Zentsuji	...	{ Reg. 12 ...	Zentsuji
				{ Reg. 22 ...	Matsuyama
	Infantry	Brig. 22 : Tokushima	...	{ Reg. 43 ...	Tokushima
				{ Reg. 44 ...	Kochi
	Caval. Reg. 11 ; Mount. Art. Reg. 11 ; Eng. Bat. 11 ; Comt. Bat. 11 ...				Zentsuji
12th Division (Kurume)	Infantry	Brig. 12 : Fukuoka	...	{ Reg. 14 ...	Kokura
				{ Reg. 24 ...	Fukuoka
		Brig. 24 : Kurume	...	{ Reg. 46 ...	Omura
	Infantry			{ Reg. 48, Bats. 1, 2	Kurume
				{ Reg. 48, Bat. 3	Saga
	Field Heavy Art. Brig. 2 : Kokura Field Art. Reg. 24 ; Independent Mountain Art. Reg. 3 ...				Kokura Kurume
	Shimonoseki Heavy Art. Reg. ...				Shimonoseki
	Sasebo Heavy Art. Battalion ...				Sasebo
	Keichi Heavy Art. Battalion ...				Keichi
	Flying Reg. ...				Tachiarai
14th Division (Utsunomiya)	Infantry	Brig. 27 : Utsunomiya	...	{ Reg. 2 ...	Mito
				{ Reg. 59 ...	Utsunomiya
		Brig. 28 : Takasaki	...	{ Reg. 15 ...	Takasaki
	Infantry			{ Reg. 50 ...	Matsumoto
		Caval. Reg. 18 ; Field Art. Reg. 20 ; Comt. Bat. 14 ... Eng. Bat. 14 ...			Utsunomiya Mito
16th Division (Kyoto)	Infantry	Brig. 19 : Kyoto	...	{ Reg. 9, Bats. 1, 2	Kyoto
				{ Reg. 9, Bat. 3	Otsu
				{ Reg. 20	Fukuchiyama
	Infantry	Brig. 30 : Tsu	...	{ Reg. 33 ...	Tsu
				{ Reg. 38 ...	Nara
	Caval. Reg. 20 ; Field Art. Reg. 22 ; Eng. Bat. 16 ; Comt. Bat. 16 ...				Kyoto
	Flying Reg. 3 ... Maizuru Heavy Art. Bat. ...				Yokaichi Maizuru
19th Division (Ranan, Chosen)	Infantry	Brig. 37 : Kanko	...	{ Reg. 73 ...	Ranan
				{ Reg. 74 ...	Kanko
		Brig. 38 : Ranan	...	{ Reg. 75 ...	Kainei
	Infantry			{ Reg. 76 ...	Ranan
		Caval. Reg. 27 ; Field Art. Reg. 25 ... Eng. Bat. 19 ...			Kainei

20th Division (Ryusan, Chosen)	Infantry	Brig. 39 : Heijo	{	Reg. 77	Heijo
				Reg. 78	Ryusan
		Brig. 40 : Ryusan	{	Reg. 79	
				Reg. 80, Bats. 1, 2	Taikyu
	Caval. Reg. 28; Field Art. Reg. 26; Eng. Bat. 20 ...	{	Reg. 80, Bat. 3	Taiden	
			Ryusan		
			Flying Reg. 6		Heijo
Masan Heavy Art. Bat.		Masan			

13th Division at Takata, 15th Division at Toyohashi, 17th Division at Okayama and 18th Division at Kurume were abolished in April '25.

Note.—Figures show numbers of brigades or regiments, etc.; Locations of the headquarters are given either after colon or dot.

8. THE MILITARY LIMITATION PROGRAM

The general march of events in the world, especially after the Washington Conference, has induced our authorities to act up to what the signs of the times demand in the important problem of limitation. It was time that they should, from considerations both military and financial. Public opinion at home, chafing long under what it considered the exacting demands of the militarists in their appropriations and now encouraged by the Conference, began to insist that the Army should follow the example set by the Navy and be subjected to thorough process of curtailment. The cry became universal and finally took concrete shape as a representation of the House of Representatives passed undivided in the 1921-22 session of the Diet. It was to the effect that the army budget should be cut down by at least ¥40 millions a year and that the term of service of conscripts be reduced from two years to 1 year 4 months.

1st Curtailment.—The representation was received with a good grace by the Army, and 1800 officers (spread over two years for administrative convenience), 56,000 rank and file and 13,000 horses were eliminated, this corresponding to a reduction of about five Divisions on peace strength.

Among other important items on the readjustment program effected in 1923 were the curtailment by 40 days of the term of service in barracks and by 47 days in calls of reservists of foot-soldiers, 87 days in all; reduction of the barrack service from three months to two months for commissariat. There were also the abolition of the independent garrisons, the elimination of the higher officers' complement in Chosen, etc.

The retrenchment effected in the years 1923-24 amounted to ¥313 millions on ordinary account and ¥41 millions on extraordinary account, total ¥354 millions approximately.

2nd Curtailment.—In the second reduction carried out on May 1, 1925, four Army Divisions specified before were abolished, and the 12th Division hitherto stationed at Kokura (Kyushu) was removed to Kurume. The abolition of the four divisions affected 16 infantry regiments, 4 cavalry regiments, 4 field artillery regiments, 4 engineer battalions and 4 commissariat battalions, which were all disbanded, as also the motor-car battalion stationed at Setagaya in the suburbs of Tokyo. As the result of the abolition of four divisions, approximately 27,000 officers, non-commissioned officers and privates were discharged, the

figure including about 1,180 officers and non-combatant officers. Besides these officers, about 300 officers were previously relieved of their duties during the previous year as the first curtailment connected with the division reduction, and more were discharged by the end of March 1926.

9. THE REORGANIZED ARMY SYSTEM

The new system, which was enforced in the summer of 1925, being based on the principle of quality than quantity, the authorities framed a program for new equipments to compensate for what was lost in the man-power. This new equipment includes the establishment of ten air companies, six anti-aircraft corps with 24 anti-aircraft guns, and two regiments of tank corps with forty tanks. At the same time redoubled efforts will be made to make research into poison gas and other chemical methods.

Of the two new tank corps, each with twenty tanks, one (1st tank corp) was organized and stationed at Kurume and the other (2nd) at the infantry school, Chiba prefecture. A regiment of the anti-aircraft corps was organized in '27 and stationed at Hamamatsu, another regiment at the field artillery school in Yotsukaido, Chiba prefecture, and a detachment of similar corps at Ryusan in Korea. Two additional air regiments were also organized and stationed at Hamamatsu and Koshun (Formosa). An army communications school and an army motor-car school were created in Tokyo. The Manchurian independent garrison and the high (maximum) complement of the Korean army, which were to be discontinued in 1925 according to the previously determined program, are to be maintained for the present in view of the situation obtaining in Manchuria and Korea.

The proposal to reduce the period of active service of infantry men from 24 months to 18 months has caused the authorities to enforce a compulsory system of military training of the rising generation and especially the students of middle and higher schools. The education authorities introduced the particular item into the curriculum of those schools, commencing April 1925, training being given by army officers in active service specially detailed by the Minister of War. Over 1,000 army officers have been selected from among all army divisions for this purpose and appointed instructors of military training in universities, colleges, other higher schools, middle schools, etc.

At the same time, the term of the active service for graduates of normal and other schools have been reduced. As the result thereof the former system of one-year volunteer service was discontinued after 1927 (for further details vide Chap. Education, Ed. J. Y. B.)

SECTION II. THE NAVY

1. INTRODUCTORY REMARKS

Before the Restoration

Absence of stimulus at first, and then the enforcement of a seclusion policy during the Tokugawa period, caused the mari-

time and naval activities of Japan to remain comparatively insignificant. The only noteworthy instances of naval operations witnessed in early days were a seafight at Dan-no-ura between the two clans of Genji and Heike in the 12th century, and the encounters at the time of Hideyoshi between Japanese and Korean fleets off the Korean coast, when the former was rather hard pressed by a Korean Admiral. So far as bold maritime adventurers are concerned, the predatory visits of Japanese piratical junks to the coast of southern China about the beginning of the 17th century may have been far more important in the maritime history of the country. It was about that time too that Japanese junks used to sail for commercial purposes to Korea, China, also to Java, the Philippines, Siam and India.

In the Meiji Era

Because of the isolation policy pursued by the Tokugawa Shogunate, Japan possessed not a single warship fit for service when European and American ships visited her shores in the middle of the 19th century to persuade her to open the country for foreign trade. The sight of these huge foreign men-of-war strongly impressed the whole nation with the necessity of sea armament. The Shogunate and some of the more powerful feudal princes, such as the Princes of Satsuma and Tosa, purchased or ordered war vessels. At the time of the Restoration (1868) Japan possessed not more than 10 such warships, of which eight that belonged to the Shogunate were sunk or destroyed in the battle off the port of Hakodate. When in 1870 a War Department was created by the new Government, the puny "fleet" in being was made subordinate to it, though two years later the two services were divided into the Army and Navy Departments, the latter having acquired in that short period 17 warships with an aggregate tonnage of 14,000 tons. This formed the nucleus of the Japanese Navy.

Gradually expanded in tonnage it had grown to 59,000 by the time of the Sino-Japanese War (1894) and to 260,000 on the occasion of the more formidable Russo-Japanese War (1904). The expansion subsequently made was so rapid that when the Washington Conference was opened in 1921 the Imperial fleet comprised 15 battleships, 7 battle-cruisers, about 50 cruisers, coast-defence ships, and gun-boats, including other auxiliary ships, 130 torpedo boat destroyers and torpedo boats and about 30 submarines, representing an aggregate tonnage of approximately 770,000 tons.

2. THE NAVAL PROGRAM

It should be remembered that at the time of the Washington Conference the Japanese Navy had on hand a program for the construction of the first 8-8 unit fleet as approved by the 1920 (41st) session of the Diet. The project was to have been completed by 1927. The 8-8 unit fleet, as originally decided upon after repeated postponement, consisted of a main force of 8 battleships armed with 16-inch guns (the Nagato and later

ships), and 8 battle-cruisers (the Akagi and later ships), and auxiliaries of 26 cruisers, 94 torpedo-boat destroyers, and 93 submarines. This scheme had to be abandoned, in conformity with the Naval Treaty agreed upon at the Conference, only the Mutsu and the Nagato on the list being retained. The construction of 6 other battleships and 8 battle-cruisers was either suspended or given up, with the exception of the battle-cruisers Akagi and Amagi which, however, were retained to be rebuilt as aeroplane tenders. As the Conference did not come to any definite agreement in regard to cruisers and other auxiliary ships, excepting aeroplane carrier, the Japanese Navy decided to follow the prescribed program in this respect, though with some reduction. The program for these ships to be completed by 1927 was as follows before the earthquake of September 1, 1923, necessitated one year postponement:—

Kind of Ships		No.	Tonnage
Cruisers (Tenryu built in 1919, and later ships)....		25	150,000
Of which	{ Completed or ordered by July '22....	17	82,000
	{ Not yet ordered.....	8	68,000
Destroyers (Built in 1918 and later).....		81	89,600
Of which	{ Completed or ordered by July '22....	57	56,000
	{ Not yet ordered.....	27	33,000
Submarines		67	68,536
Of which	{ Completed or ordered by July '22....	47	28,166
	{ Not yet ordered.....	22	

By 1928,* therefore, the strength of the Japanese Navy will be as follows:—

Capital ships	10	301,320
Battleships (Mutsu, Nagato, Hyuga, Ise, Yamashiro, Fuso)	6	191,320
Battle-cruisers (Kongo, Hiyei, Kirishima, Haruna). ..	4	110,000
Cruisers	25	157,700
Destroyers	81	89,000
Submarines	67	68,536

Besides the above there were at the time about 40 cruisers, coast defence ships, gunboats, etc. of older type representing a tonnage of 150,000, and about 100 torpedo boat destroyers and torpedo boats, also of older type amounting to 27,000 tons.

The lesson taught by the Great War has persuaded Japan to slightly modify, strictly within the limit of the Washington Conference, the original 8-8 program, and to supersede the plan of building light cruisers of 5,500 ton class with one of 7,000 tons, and moreover to construct four 10,000 ton high-speed cruisers equipped with 8-inch guns. This preference for vessels of larger tonnage is also seen as regards destroyers and submarines, as Japan is to follow as far as possible the example set by the leading Naval powers of the world.

3. NAVAL EXPENDITURE

The Navy has suffered heavily from the seismic disaster of 1923. According to the statement made by the responsible Minister the direct losses sustained amounted to ¥91,500,000, consisting of ¥68,500,000 for Yokosuka and neighborhood,

¥20,000,000 for Tokyo and ¥3,000,000 for Hiratsuka. The same calamity has also caused slight delay in the prescribed period of the Naval program as revised in conformity to the Washington treaty. The proposed budget for the fiscal year 1923 amounted to ¥278 millions and that for 1924 to ¥279, both in round figures, but as both budgets failed to exist owing to the dissolution of the Diet, the working budget adopted as the only alternative left open in such cases demanded the reduction of ¥39 mil. for 1923 and ¥41 for '24, the total for the two years, therefore, standing at ¥239 and ¥238 respectively.

4. NAVAL PORTS

The coast of Japan is divided into three naval districts, each having its Naval Port, i.e., Yokosuka, Sasebo, and Kure. At each of these ports there is an Admiralty, with an arsenal, a marine corps and other provisions necessary for a naval base. Besides there are Strategic Ports at Maizuru, Ominato, and Chinkai (Korea).

5. NAVAL ARSENALS AND SHIPBUILDING

Each Admiralty has an arsenal provided with a shipbuilding yard and possesses a dry dock for accommodating large warships. The Yokosuka and Kure Arsenals have each two cradles, one capable of taking in superdreadnoughts of over 40,000 tons, but the Sasebo and Maizuru Arsenals are provided only with one cradle for building cruisers and lesser ships. Besides the above there are private establishments approved by the Navy. They are the Mitsubishi Shipyard at Nagasaki, Kawasaki Shipyard at Kobe and six others. The first two have capacity of building superdreadnoughts.

The first warship built in Japan was the Seiki of 870 tons launched at Yokosuka in 1875. Till 1903 the largest warship constructed at home was the cruiser Hashidate of 4,223 tons. The improvement effected since that time is demonstrated by the building of the battleships Kurama (14,600 tons) and Satsuma (19,300 tons) in 1909. The launching in Oct. 1910 at Yokosuka of the Kawachi (20,800 tons), the first dreadnought attempted at home, marks another stage in the progress of naval architecture in Japan.

Supply of Building Materials at Home

Japan is almost self-dependent as regards materials for war implements. Armor plates, rails, etc. are now turned out to the extent of about 190,000 tons a year at the Imperial Iron Works at Yawata, Kyushu, the plates being also produced at the Naval Yard belonging to the Kure Admiralty. A steel works established in 1908 at Muroran, Hokkaido, as a joint undertaking of the Hokkaido Colliery and Steamship Co. and Armstrong and Vickers, with the countenance of the Navy, is devoted to casting guns and some commercial products.

In wood Siamese teak and Oregon pine are used for decks,

while foreign oaks, maples, etc. are used for decorative parts. "Keyaki" (*Obelicea serrata makino*) erroneously known as Japanese "Zelkova" oaks, etc. also serve for the latter purpose.

6. PERSONNEL OF THE SERVICE

Officers.—Besides the executive officers there are in the civil branch engineers, surgeons, pharmacists, hydrographers and construction, mechanical and ordnance officers. The executive officers, engineers, surgeons and paymasters are trained respectively at the Naval College, Engineering College, Surgery School and Paymasters School. The other non-combatant officers are appointed from among the candidates who should be graduates of universities or other schools of similar grade.

Petty and Warrant Officers.—The first are appointed by selection from among the 1st class seamen, and are of 1st to 3rd classes, while for the second the 1st class petty officers are eligible. Warrant officers of meritorious active service of not less than 5 years may be commissioned and gradually promoted as special service officers to the rank of Lieut.-Commander or even higher.

Officers and Men of the Service

The personnel of the service for the four years ending Dec. 1925 was as follows:—

Year	Active service	Reserve 1st	Reserve 2nd	Total
1922	71,961	12,658	12,564	97,176
1923	72,470	31,827	15,274	119,571
1924	71,777	31,827	15,274	119,571
1925	73,880	30,366	12,849	117,095

Those on the active list numbered as follows at the end of 1925:—

	Active	Reserve	2nd Reserve	Total
Adm. to Rear-Adm. and ranking officers	93	185	60	338
Captains to Lieut.-Commanders and ranking officers.....	1,726	827	181	2,734
Lieutenants to 2nd Sub-Lieutenants and ranking officers....	1,677	198	60	1,935
Special service officers.....	1,146	451	212	1,810
Warrant officers	1,504	338	83	1,925
Petty officers	16,338	11,296	—	27,634
Midshipmen	120	—	—	120
Bluejackets	50,786	17,020	12,253	80,109
Cadets at schools.....	490	—	—	490
Total	73,880	30,366	12,849	117,095

Volunteers and Conscripts

In the Navy the volunteer service is supplemented by conscription. The annual enlistment of men makes the following record for the five years ending December 1926:—

Year	Conscripts	Volunteers
1922	4,385	6,430
1923	6,370	4,094
1924	6,526	5,549
1925	6,740	5,166
1926	7,050	5,789

Limitation of Armaments and Elimination of Officers

The elimination of officers in accordance to the Limitation of Armaments was begun in Aug. '22 and completed in Mar. '24. The total eliminated was as follows:

Full Admirals	8	Vice-Admirals	52
Rear Admirals	99	Captains	290
Commanders	262	Lieut.-Com.	171
Lieutenants	115	Sub-Lieutenants	43
		Total	1,040

At the same time warrant and ranking officers were reduced by over 700 and petty officers and seamen by over 13,000.

Naval Officers' Promotion

Promotion by selection is the rule in the Japanese Navy. Candidates for special promotion are selected at the conference of the Admirals' Council. The time-limit for promotion is reduced to one half in time of war. The regular course of promotion for junior officers is as follows.—Midshipmen, over one year's service in a training ship; 2nd Sub-Lnts. over one year's service; 1st Sub-Lnts. over 18 months of which six months in Torpedo or Gunnery School; Lnts. of over 4 years in the service are promoted to Lieut.-Commanders.

Special service 1st Sub-Lnts. over two years' service; Special service 2nd Sub-Lnts. over three years' service; Special service Lieutenants (combatants, engineers and paymasters) may be promoted to Lieut.-Commander by special appointment.

Commanders.—Lieut.-Commanders of over two years' service.

Captains.—Commanders of over two years' service.

Rear-Admirals.—Captains of over two years' service.

Vice-Admirals.—Rear-Admirals of over three years' service.

Admirals.—Vice-Admirals who have seen much actual service or of special merits are promoted by Imperial order.

N. B.—1st class warrant officer or equivalent of over 6 years in the service may be promoted to 1st Lieutenant or equivalent.

Age Limit of Officers in Active Service

Fleet Admiral	No limit
Admiral	65
Non-Combatant Vice-Admiral	62
Vice-Admiral	60
Rear-Admiral & Non-Combatant Rear-Admiral...	58
Non-Combatant Captain	54

Captain & Engineer Captain.....	52
Non-Combatant Commander	50
Commander & Engineer Commander.....	48
Non-Combatant Lieut.-Commander	47
Lieut.-Commander & Engineer Lieut.-Com.....	45
Non-Combatant Lieutenant	44
Lieutenant and Engineer Lieutenant.....	43
Sub.-Lieutenant (Non-Combatant, 1st & 2nd)....	40
Sub.-Lieut. & Eng. Sub.-Lieut. (1st & 2nd).....	38

7. NAVAL EDUCATION

The eight educational institutions are the Naval Staff College, Naval College (or Cadets School), Engineering College, Torpedo School, Gunnery School, Artificers School, Paymaster School and Surgery School, all thoroughly recast after the European War. In 1921 the Submarine School was established at Kure.

Latest Statistics (1928)

	Staff	Students	Graduates
Naval Staff College.....	108	111	68
Naval College	49	383	123
Naval Engineering College....	50	150	61
Surgery School	15	124	52
Paymaster School	51	53	19
Gunnery School	32	1,147	1,729
Torpedo School	38	1,095	889
Submarine School	17	263	506

8. THE IMPERIAL FLEETS

The Standing Fleets

The standing fleets as reorganized on Nov. 30, 1926, consist of the following:

1st Squadron (Commander-in-Chief Adm. K. Kato):

1st Battle Squadron (Com. Adm. Kato)—Nagato, Mutsu, Ise & Hyuga.

2nd Battle Squadron.—

3rd Battle Squadron (Com. Rear-Adm. N. Ominato)—Abukuma, Kinu & Kuma.

1st Torpedo Battle Squadron (Com. Rear-Adm. I. Okamoto)—Tatsuta & 15 destroyers.

1st Submarine Battle Squadron (Com. Rear-Adm. H. Yuji)—Yura, Jungei & 9 submarines.

2nd Squadron (Commander-in-Chief Vice-Adm. K. Otani):

4th Battle Squadron (Vice-Adm. Yoshikawa)—Kongo & Hiyel.

5th Battle Squadron (Com. Vice-Adm. K. Hara)—Kako, Furutaka, Jintsu & Naka.

2nd Torpedo Bat. Squadron (Com. Rear-Adm. A. Tachi)—Yubari & 18 destroyers.

2nd Submarine Bat. Squadron (Com. Rear-Adm. S. Shigeoka)—Chogei & 8 submarines.

1st Oversea Squadron (Com. Rear-Adm. H. Ukawa)—Tone, Ataka, Fushimi, Sumida, Saga, Seta, Katata, Hira, Hodzu, Hirado & 4 destroyers.

2nd Oversea Squadron (Com. Rear-Adm. K. Mukōda).

1st Tender Squadron (Com. Rear-Adm. S. Takahashi)—Flagship Akagi.

Training Squadron (Com. Vice-Adm. S. Kobayashi)—Izumo & Yakumo.

Classification of the Ships

According to the newly arranged classification in 1924 the ships are subdivided into:—(1) Battleships; (2) Battle cruisers; (3) 1st class cruisers (displacement over 7,000 tons); (4) 2nd class cruisers (displacement under 7,000 tons); (5) 1st class coast defence ships (displacement over 7,000 tons); (6) 2nd class coast defence ships (displacement under 7,000 tons); (7) 1st class gunboats (displacement over 800 tons); (8) 2nd class gunboats (displacement under 800 tons); (9) 1st class destroyers (displacement over 1,000 tons); (10) 2nd class destroyers (displacement 600-1,000 tons); (11) 1st class submarines (displacement over 1,000 tons); (12) 2nd class submarines (displacement 600-1,000 tons); (13) 3rd class submarines (displacement under 500 tons); (14) Seaplane carriers; (15) mine-layers; (16) mine sweepers; (17) torpedo carriers; (18) special service Ships; etc.

Torpedo boats were abolished in 1924 and all dismantled and sold or otherwise disposed of.

Warships, Destroyers, Special Service Ships, etc.

Extant on Aug. 31, '28)

	No.	Tonnage
Battleships	6	191,320
Battle-cruisers	4	110,000
1st class cruisers.....	8	69,000
2nd class cruisers.....	21	106,755
Seaplane carriers	4	71,575
Torpedo carriers	4	28,730
Mine layers	3	19,685
1st class defence Ships.....	7	74,098
2nd class defence Ships.....	2	7,336
1st class gun-boats.....	2	2,070
2nd class gun-boats.....	9	3,308
(Total	70	683,878)
1st class destroyers.....	56	73,485
2nd class destroyers.....	50	40,490
(Total	106	113,975)
Mine sweepers	24	11,056
Submarines	78	71,836

Besides, there are 28 special service ships including 3 training ships, 1 target boat, 3 surveying ships, 18 transports and 1 ice-breaker.

LIST OF WARSHIPS (August 31, 1928)

Battleships

Name	Displacement (tons)	Length (feet)	When launched	Normal speed (knots)	Torpedo tubes	Armor at water line (feet)	Main armament (Caliber)	High-angle Guns
Fuso	30,600	630	1914	22.5	6	28	36(12); 8cm.(4)	
Yamashiro	30,600	430	1915	22.5	6	28	"	"
Ise	31,260	640	1916	23.0	6	28	"	"
Hyuga	31,260	640	1917	23.0	6	28	"	"
Nagato	33,800	660	1919	23.0	8	30	40(8);	"
Mutsu	33,800	660	1920	23.0	8	30	"	"

Battle Cruisers

Hiei	27,500	653	1912	27.5	7	27	36(8);	8(4)
Kongo	27,500	653	1912	27.5	"	"	"	"
Kirishima ..	27,500	653	1913	27.5	"	"	"	"
Haruna	27,500	653	1913	27.5	"	"	"	"

First Class Cruisers

Kako	7,100	580	1925	33.0	12	14	20(6);	8(4)
Furutaka ..	"	"	"	"	"	"	"	"
Knukasa ...	"	"	1926	"	"	"	"	"
Aoba	"	"	"	"	"	"	"	"
Myoko	10,000	"	1927	"	"	"	12(10);	12(4)
Nachi	"	"	1927	"	"	"	"	"
Ashigara ...	"	580	1928	"	"	"	"	"
Haguro	"	"	"	"	"	"	"	"
Atago	"	(in course of construction)					"	"
Takao	"	("	"	"	")	"	"
Chokai	"	("	"	"	")	"	"

Second Class Cruisers

Tone	4,100	360	1907	23.0	3	16	15(2);	12(10)
Chikuma ...	4,950	440	1911	26.0	"	"	"(8);	8
Hirado	"	"	"	"	"	"	"	"
Yahagi	"	"	"	"	"	"	"	"
Tatsuta	3,500	"	1918	31.0	6	18	14(4);	8(1)
Tenryu	"	"	"	"	"	"	"	"
Kuma	5,500	500	1919	33.0	8	15	14(7);	"
Tama	"	"	1920	"	"	"	"	8(2)
Kitakami ..	"	"	"	"	"	"	"	"
Oi	"	"	"	"	"	"	"	"
Kiso	"	"	"	"	"	"	"	"
Nagara	5,570	"	1921	"	"	"	"	"
Natori	"	"	1922	"	"	"	"	"
Isuzu	"	"	1921	"	"	"	"	"
Yura	"	"	1922	"	"	"	"	"
Kinu	"	"	"	"	"	"	"	"
Abukuma ..	"	"	1923	"	"	"	"	"
Yubari	3,100	435	"	"	"	"	"(6);	"
Sendai	5,595	500	"	"	8	15	"(7);	8(2)
Naka	"	"	1925	"	"	"	"	"
Jintsu	"	"	1923	"	"	"	"	"

First Class Coast Defence Ships

Name	Displacement (tons)	When launched	Speed (knots)	Main Armament
Asama	9 885	1898	21.25	20cm.(4); 8cm.(1)
Yakumo	9.735	1899	20.00	" " " "
Azuma	9.426	"	"	" " " "
Iwate	9.826	1900	20.75	" " " "
Izumo	9 826	"	20.75	" " " "
Nisshin	7.700	1903	20.00	20cm.(4); 8cm.(1)
Kasuga	7,700	"	20.40	25cm.(1); 8cm.(1)

Second Class Coast Defence Ships

Name	Displ't (tons)	Launched	Speed (knots)	Arma- ment	Name	Displ't (tons)	Launched	Speed (knots)	Main Arm't.
Tsu- shima	3,420	1902	20	15(6); 8(1)	Manshu	3,916	1901	17	8cm.(2)

Sea-Plane Carriers

Akagi 28,100 1925 28.5 20(10); 12(12)	Waka- miya 5,875 1901 11 8(2)
Kaga 28,100 1928 23.0 20(10); 12(12)	Hosho 9,500 1921 25 14(4); 8(2)

First Class Gunboats

Yodo 1,250 1907 22 12cm.(2)	Ataka 820 1922 16 12cm.(2)
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Second Class Gunboats

Uji 620 1903 13 8cm.(4)	Hira 338 1923 16 8cm.(2)
Sumida 126 " " 6cm.(2)	Hozu " " " "
Fushimi 180 1906 14 " "	Seta " " " "
Toba 250 1911 15 8cm.(2)	Katada " " " "
Saga 780 1912 " 12cm.(1)	

First Class Destroyers

Name	Displacement tons	When launched	Name	Displacement tons	When launched
Amatsukaze	1,227	1916	Yakaze	1,345	1920
Isokaze	"	"	Hakaze	"	"
Hamakaze	"	"	Nadakaze	"	"
Tokitsukaze	"	"	Akikaze	"	"
Umikaze	1,150	1910	Shlokaze	"	"
Yamakaze	"	1911	Tachikaze	"	1921
Urakaze	907	1915	Hokaze	"	"
Ekaze	1,300	1917	Yukaze	"	"
Tanikaze	1,300	1918	Numakaze	"	1922
Minekaze	1,345	1919	Nokaze	1,345	1921
Sawakaze	"	"	Namikaze	"	1922
Okikaze	"	"	Kamikaze	1,400	1922
Shimakaze	"	1920	Asakaze	"	"

Harukaze	1,400	1922	Kikuzuki	1,445	1926
Matsukaze	"	1923	Mikazuki	"	"
Hatakaze	"	1924	Mochizuki	"	1927
Olte	"	"	Yuzuki	1,445	"
Hayate	"	1925	Fubuki	"	"
Asanagi	"	1924	Shirayuki	1,700	1928
Yunagi	"	"	Hatsuyuki	"	"
Mutsuki	1,445	"	Miyuki	"	"
Kisaragi	"	1925	Murakumo	"	"
Yayoi	"	"	Shinonome	"	"
Uzuki	"	"	Usugumo	"	"
Satsuki	"	"	Shirakumo	"	"
Minazuki	"	"	Isonami	"	"
Fumizuki	"	1926	Uranami	"	"
Nagatsuki	"	"	Ayanami	"	"

Second Class Destroyers

Name	Displacement (tons)	When launched	Name	Displacement (tons)	When launched
Sakura	600	1911	Nashi	850	1919
Tachibana	"	1912	Nire	"	"
Matsu	665	1915	Kaki	"	"
Kashiwa	"	"	Kuri	"	1920
Kaba	"	"	Tsuga	"	"
Sakaki	"	"	Kiku	"	"
Kayede	"	"	Susuki	"	1921
Kusunoki	"	"	Awol	"	1920
Ume	"	"	Hagi	"	"
Katsura	"	"	Fuji	"	"
Kiri	"	"	Tsuta	"	1921
Sugi	"	"	Ashi	"	"
Kashi	835	1916	Hishi	"	"
Hinoki	"	"	Hasu	"	"
Momo	"	"	Tade	"	1922
Yanagi	"	1917	Yomogi	"	"
Enoki	850	1918	Sumire	"	1921
Keyaki	"	"	Wakatake	900	1922
Maki	"	1917	Kuretake	"	"
Tsubaki	"	1918	Asagao	"	"
Kuwa	"	"	Fuyo	"	"
Nara	"	1918	Sanaye	"	1923
Kaya	"	1919	Sawarabi	"	"
Momi	"	"	Yugao	"	"
Take	"	"	Karukaya	"	"

Mine Layers

Name	Displacement (tons)	Length feet	When launched	Nominal speed (knots)	Armor at water line feet	Main armament
Tokiwa	9,885	408	1898	21.25	24	20cm.(4); 8cm.(1)
Aso	7,800	425	—	22	22	15cm.(8);
Shoriki	2,000	240	1916	13	13	12cm.(3)

Special Service Ships

Name	Displacement (tons)	Length (feet)	When launched	Nominal speed (knots)	Armor at water line (feet)	Main armament
Asahi	—	400	1899	—	—	—
Shikishima ..	—	400	1898	—	—	—
Fuji	—	374	1896	18½	—	—

Target Ship

Settsu	—	500	1911	—	—	—
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Surveying Ships

Yamato	1,502	201	1885	14	15	8cm.(4)
Matsuyo	2,550	237	1898	—	14	5cm.(2)
Koshu	2,270	252	1904	10.3	12	8cm.(2)

Transports

Takasaki	5,987	375	1902	10	15	8cm.(2)
Selto	8,300	241	1906	"	21	"
Tsurugisaki...	1,970	210	1917	9	14	"
Sunosaki	9,800	400	1918	14	23	12cm.(2); 8cm.(2)
Muroto	8,751	345	1918	12½	"	12cm.(2)
Nojima	"	"	1919	"	"	"
Notoro	15,400	455	1920	12	26	12cm.(2)
Shiretoko ...	"	"	"	"	"	"
Yerimo	"	"	"	"	"	"
Sata	"	"	"	"	"	14cm.(2)
Tsurumi	"	"	1921	"	"	"
Shiriya	"	"	"	"	"	"
Iro	"	"	1922	"	"	"
Kamui	19,500	496	"	15	28	"
Ondo	15,400	455	"	12	26	"
Hayatomo ...	"	"	"	"	"	"
Naruto	15,400	455	1923	12	26	14cm.(2)
Mamiya	17,500	475	"	14	28	"

Ice Breaker

Otomari	2,830	200	1921	13	21	8cm.(1)
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Torpedo Carriers

Name	Displacement	Launched	Speed (knots)	Main arm't	Name	Displacement	Launched	Speed (knots)	Main arm't
Kan-zaki	10,500	1896	—	8cm.(1)	Tungel	8,500	1923	16.0	14cm.(4)
Komahashi	1,230	1913	13.9	8cm.(2)	Chogei	"	1924	"	"

Submarines

The Navy possesses 58 submarines at present. Of these, 10 (3rd class boats) are of smaller type (below 500 tons), and used for training purpose: 45 (2nd class boats) are of 650 to 1,000 tons and the rest (1st class boats) over 1,400. All future ones will be over 1,000 tons.

SECTION III—AVIATION

1. MILITARY AVIATION

Two officers who were trained in France and returned home in 1911 were the first airmen in Japan, followed by two others in 1912 and three in 1913. In 1919, an aviation section was created in the War Office and the first military aviation school was opened at Tokorozawa, near Tokyo, in January, '20, to give training in the first year to about 100 students including both commissioned and non-commissioned officers, besides admitting a few civilians. In 1922, two military aviation schools were newly established, one at Shimoshidzu (Chiba Prefect.) and the other at Akeno (Miye Prefect.) Since 1917 the Army has yearly bought powerful machines from Europe, while at the same time efforts were made to produce them at home, with the result that machines of excellent make are now produced at government and private factories.

Japan sent an aviation mission to the Italian front during the European war in August, 1918, it consisting of 22 officers (1 died there) and over 70 artisans. They returned home in August, 1919. Equally noteworthy was the arrival in February, '19, of some 60 French army aviators including 17 officers headed by Col. Faure, for giving training to Japanese aviators. Another noteworthy fact was the participation with marked success of the aviators of the army and navy in the Tsingtao campaign of 1914.

On June 1, '25, the military aviation corps were made independent on equal footing as infantry, cavalry, field artillery, etc., and at the same time each air battalion was reorganized into an air regiment. Simultaneously with the independence of the air force two bombing regiments were newly added to the extant force.

Flying Regiments.—The military air force consists at present of 8 flying regiments (consisting of 11 reconnoitring, 6 fighting and 2 bombing companies) and one balloon corps, organized with 3,500 officers and men and equipped with 500 standing machines. The headquarters of the flying regiments are located as follows:

1st Regiment (2 air companies) and 2nd Regiment (2 air companies) at Kagamigahara, Gifu Prefecture.

3rd Regiment (3 air companies) at Yokaiichi, Shiga Prefecture.

4th Regiment (3 air companies) at Tachiarai, Fukuoka Prefecture.

" " " fliers...	{ killed	0.61	0.97
	{ injured	1.35	0.75
No. of cruise per 1 casualty.	{ killed	11,167	7,647
	{ injured	5,169	9,832
No. of flying hours per 1 casualty	{ killed	3,474	2,017
	{ injured	1,603	2,594
No. of fliers per 1 casualty.	{ killed	16,313	10,347
	{ injured	7,529	13,303
No. of accidents per 10,000 cruises: Machines	{ Serious	11.76	9.15
	{ Slight	6.85	8.14
No. of accidents per 10,000 cruises: Motors	{ Serious	4.76	8.42
	{ Slight	8.78	6.68
No. of accidents per 10,000 hours flight: Machines...	{ Serious	47.90	34.69
	{ Slight	22.07	30.84
No. of accidents per 10,000 hours flight: Motors.....	{ Serious	16.79	31.39
	{ Slight	28.29	25.34

2. NAVAL AVIATION

Naval aviation in Japan dates from 1912 when our officers trained in France and America returned home. It was not long before a training ground was established at Oppama near Yokosuka and an experimental course was started. From 1912 till 1917, the sum yearly disbursed for this service amounted to ¥3-400,000, to increase in 1918 to ¥1 million and to ¥2 millions in 1919, the total aggregating ¥5,800,000 in ten years. A new expansion program decided in 1920 was completed by March, 1923, bringing the strength of the existing naval air force up as follows:

Yokosuka	{ 6 fleets of sea-planes, 48 machines. 1 tender squadron.
Kasumigaura	{ 2½ fleets of sea-planes, 20 machines, 1 zeppelin corps.
Sasebo	½ fleet, 4 machines.

Expansion Program

Further increase in the strength of the respective forces as follows by 1927 has had its completion postponed for one year owing to the earthquake:

Kasumigaura.....	7 fleets (56 machines) and 1 zeppelin corps (2 ships).
Yokosuka.....	5 fleets (40 machines) and 1 balloon corps.
Sasebo.....	3 fleets (24 machines).
Omura.....	2 fleets (16 machines).

Total 17 fleets (136 machines) and 1 zeppelin corps (2 airships).

The annual allotment for the up-keep of this standing force is on ordinary account ¥16 millions, and 70 per cent. replacement policy is to be pursued. The existing strength of naval air force consists of 4 tender ships, 13 fleets (108 machines), 10 balloons and 2 airships these being apportioned as follows:

Kasumigaura.....	7 fleets (56 machines) and 1 zeppelin corps (2 ships).
Yokosuka.....	3 fleets (24 machines) and 1 balloon corps (10 balloons).
Sasebo.....	1½ fleets (12 machines).
Hiro.....	½ fleets (4 machines).
Omura.....	1½ fleets (12 machines).

The unit of 1 fleet (which corresponds to 1 flying company of the Army air force) being 8 machines with several reserve machines, the aggregate strength of the Navy air service as it stands now is 108 machines (excluding reserve machines), 200 flight officers and 200 petty officers and privates, that is, about ½ of the British and American navies and about equal to that of France.

The above is the existing status of the air force belonging to the respective naval stations. Besides, there is certain number of seaplanes carried on board the tender ships Akagi, Kaga, Hosho and Wakamiya (aggregate tonnage 69,175 tons), which belong to the combined fleet, and also a certain number of sea-planes on board the Nagato, Mutsu and other battleships, battle-cruisers and light cruisers, each carrying 2 or 3 sea-planes.

In April '27 an aviation department was created in the Navy following the example set by the Army as a step toward effecting the expansion of the Naval air force, and in April '28 a tender squadron was organized as a unit of the standing fleet, it consisting of the Akagi (flagship), Hosho, several destroyers and submarines.

Further Expansion Scheme

In view of the trend of the times and the backward situation of the present air service the Navy authorities are concentrating their efforts on the repletion of air force, about 20 percent of the total naval expenditure being now devoted to that object. They have formulated a plan to create 4 air fleets in the course of a few years hence, of which 1½ fleets are to be organized next fiscal year, and have included in the 1928-9 fiscal year's budget estimate the air force outlay totalling ¥8½ millions, i.e. 2 millions for the creation of 1½ air fleets, 4½ millions for planes on board tender ships and other warships, 2 millions for effecting diverse improvements of air service, maintenance and other incidental outlays. On the voting by the coming Diet session of the program the present air corps at Yokosuka and Sasebo will be considerably strengthened, and at the same time all smaller cruisers will be provided with one or two planes.

Besides, the Navy aviation dept. has decided to establish an air depot at Tateyama, near the entrance of Tokyo Bay, as a detachment of the Yokosuka depot, with a force consisting of 2 fleets to be detailed from Yokosuka. The program will be realized next fiscal year.

Prior to the Washington conference the Japanese navy had only one tender ship, namely, the Hosho (5,875 tons; 11 knots). Following the example of the U.S. navy which converted the supply boat Jupiter into an aeroplane tender ship Japan has

converted the battle-cruiser Akagi (26,900 tons) and the battleship Kaga (also 26,900 tons) into tender ships as the result of the Washington conference. The former was completed in 1927 and commissioned in '28, while the latter has just received armaments and is to be put to commission soon. They are the pride of the Japanese navy, and though slightly inferior to the Saratoga of the U.S. navy in respect of speed the Akagi surpasses the other in point of the range of her high angle guns of which she carries twelve 12-inchers. The Hosho and Wakamiya are by far smaller than the Akagi, but in the mode of construction they possess special features of their own. The completion of the Kaga, only second to the Akagi, is a powerful addition to the Japanese navy.

No-3 airship built at the Rome aeroplane factory which was set up at Kasumigaura by 5 Italian experts under direction of Major-Gen. Umberto Nobile, the noted Italian north pole explorer, was wrecked in a gale in October '27 when a grand manoeuvre was held. The airship was of the same design as the famous Norge. A substitute of the lost airship is being built at Yokosuka arsenal and is expected to be completed before end of the current year.

The Navy aviation is indebted to the assistance of the party of British flight officers for the marked progress it has attained, just as the Army air service owes its development to the training it received from the party of the French flight officers. From 1921 to 1922 the British naval experts led by Captain Senville gave thorough training at Kasumigaura to our flight officers whose efficiency in the operation has in consequence made striking improvement.

An Aerodrome on Hachijo Island.—The naval aerodrome on Hachijojima, the largest in the Izu archipelago, was completed in August '27, for use as base or landing spot of international air route in the trans-Pacific flight.

Navy Aviation and Accidents

	1923	1924
No. of cruise	27,231	47,535
Hours of flight	10,461	18,229
No. of fliers	52,757	86,374
Casualty per 10,000 cruises. { killed	1.84	1.89
{ injured	7.67	4.42
" " " hours... { killed	4.78	4.94
{ injured	20.07	11.52
" " " fliers... { killed	0.95	1.04
{ injured	3.98	2.44
No. of cruise per 1 casualty. { killed	5,446	5,282
{ injured	1,296	2,264
No. of flying hours per 1 { killed	2,092.19	2,025.24
casualty	498.10	868.0
No. of fliers per 1 casualty. { killed	10,551	9,597
{ injured	2,512	4,113
No. of accidents per 10,000 { Serious	50.31	35.34
cruises: Machines	206.38	353.05
{ Slight		

No. of accidents per 10,000	{ Serious	60.59	51.03
cruises: Motors	{ Slight	165.99	242.14
No. of accidents per 10,000	{ Serious	135.60	91.00
hours flight: Machines...	{ Slight	536.70	933.80
No. of accidents per 10,000	{ Serious	157.60	158.00
hours flight: Motors.....	{ Slight	431.70	631.40

The figures for casualty and accidents do not include those of the balloon corps.

3. CIVILIAN AVIATION

Though dating more than 10 years ago the progress of civilian aviation was very slow, chiefly owing to the scanty support extended by the general public to this newest means of communication and transport. The creation of the Aviation Bureau in Aug. '20 first as part of the Army and now under control of the Minister of Communications marks a new era in the history of general aviation in Japan. So marked has been the progress lately made that it is steadily emerging from the stage of curiosity and amusement to that of practical applications and business. As a means of transport, for instance, three or four regular flying services are conducted between Tokyo and Osaka, and between the latter place and Shikoku and Kyushu. The International Convention pertaining to Aerial Navigation that was signed at Paris in Oct. 1919 became effective in Japan in June 1922, and Japan issued in April '21 the Aerial Navigation Law, which, however, was not enforced till 1927.

The Army Aviation Board at first controlled both military and civilian aviation, but with a view to developing the latter which was shamefully backward owing to lack of fund it was transferred to the Communication Department in April, '23. Here again the scarcity of funds has stood in the way of its proper development. The number of flying machines used in civilian aviation is 104 as existing in December, 1927. The long pending scheme to create two aerial routes or landing stations was at last decided in 1925 at an outlay of ¥21,000,000 spread over a number of years. The proposed main aerial routes to be completed in 1927-28 are Tokyo-Dairen via Chosen and Osaka-Shanghai via Fukuoka, while landing stations (aerodromes) are to be established at Tachikawa (Tokyo), Osaka, and Fukuoka (Kyushu). Two more air routes, one to Mukden and the other to Etorop (in the Kuriles) are contemplated. Another arrangement adopted by the Communication Department's Aviation Board for the benefit of the civilian aviation is to grant bounty for upkeep and repairs and also loss of planes, a sum of over ¥90,000 being appropriated for the purpose for the 1925-26 fiscal year. The bounty measure was put into operation in April '25.

The Imperial Aero Association.—Is the first organization

of its kind created in Japan and was incorporated in 1914. It is presided over by H.H. Prince Kuni, Patron, while Baron Sakatani acts as Vice-President. The Association is maintained on donations from interested public and subscriptions paid in by the members, but the fund at its disposal is still very small. Among the notable donations so far made there are ¥500,000 from the Emperor, ¥100,000 each from Mitsui and Mitsubishi firms and ¥50,000 each from the Furukawa and Okura companies. The gift of ¥50,000 from a certain unknown American gentleman who entertains great hope for Japanese aviation should be noted also. In June 1919 the Association was formally admitted into the International Aviation Convention and sent its representatives to the general conferences held at Paris, London, etc. The plan of the Association to carry out a trans-Pacific flight in 1928 has been abandoned.

Civilian Aviators.—As existing in August '28 civilian aviators possessing 1st, 2nd and 3rd class pilots licenses numbered 215 (including 6 women and 4 foreigners). There were also 72 licensed navigators (1st & 2nd class) and 64 licensed engineers.

	No. of Fliers	No. of Flights	No. of Machines	Distance (kilo)	Hours (h.)
1922	74	2,465	25	149,628.8	1,211.14
1923	107	4,815	51	273,765.2	2,331.13
1924	128	7,858	53	404,920.7	2,523.36
1925	188	11,765	67	579,249.8	4,688.28
1926	234	14,747	82	762,853.7	5,948.54
1927	275	17,987	86	878,230.5	7,313.03

Training of Aviators.—Applicants for the training given at the expense of the Aviation Bureau must be single males of not less than 17 and not more than 20 years of age and who pass first the physical examination according to the Military standard and next examination on scholarship. The latter is modelled on the 3rd year course of the ordinary middle school. About 21 private aviation training institutes exist throughout the country, each having its own training ground or aerodrome.

The Aerial Navigation Law was enforced in June '27 and the detailed regulations pertaining to its operation specify the kinds of aviation licenses as aerial navigators, aeroplane (or hydroplane) pilots, airship pilots, balloon pilots (balloonists), aeroplane mechanics, etc. About 40 licensed aviators under the old regulations were qualified under the new, while ten students trained as aeroplane mechanics at the Tokyo Prefectural Technical School were for the first time granted license in 1927 as aeroplane mechanics.

Encouragement, Bounty, etc.—Besides giving special prizes to winners in flying contests, and also allowing, as mentioned elsewhere, one time bounty to those carrying on regular commercial air service, in April, 1923, the 2nd prize consisting of

¥3,000 in cash was awarded to the Shibaura Engineering Works for its high pressure magnetic motor and the 1st prize, ¥3,000, to the Japan Auto-car Co. for its paints for coating the wings. Also with similar object of encouragement, the Army either sells at nominal price or loans machines and motors useless to it. In April, 1923, sales of 100 machines and 350 motors and loan of 60 machines and 120 motors were made.

Regular Air Transport Service.—The first air mail service was inaugurated on April 20, '25, on the Tokyo-Osaka and Osaka-Fukuoka route, the service held thrice a week and is subsidized by the government. The Tokyo-Osaka route is conducted by the Tozai Teiki Kokukai of the Osaka and Tokyo Asahi Shimbun and the other by the Japan Air Transport Co. A thrice week service on the Sakai-Oita (Kyushu) via Shikoku route is maintained by the Koku Yuso Kenkyusho since '25. A weekly service between Tokyo and Sendai was opened in '26 by the former and a six times a year service between Osaka and Dairen via Seoul was also opened the same year by the Air Transport Co.

Regular Passenger Carrying Services.—The inauguration of a regular passenger service on the Osaka-Oita via Sakai, Takamatsu, Imaharu and Beppu route by the Japan Air Transport Co. of Osaka on May 1, '28, and a similar service on the Osaka-Tokyo and Tokyo-Sendai routes by the Tozai Teiki Kokukai of the Asahi Shimbun on August 27 same year is memorable in the history of civil aviation of Japan as marking the dawn of the practical utilization of aerial navigation for commercial purpose. The former is maintained 3 times a week with 7 Hanzar water monoplanes and the latter also 3 times a week with 4 Dornier machines, the service on the Tokyo-Sendai route being held weekly.

The establishment of the Air Transport Co. in 1928 also stands out prominent in the history of Japanese civilian aviation. It marks the advent of regular commercial stage. The Co. is backed with a capital of ¥10,000,000, and the Government, besides guaranteeing profit of 8%, undertakes to grant about ¥20 millions in eleven years as subsidy.

Manufacture of Aeroplanes

Japan has at present over 30 private factories for turning out flying machines and their parts and accessories. The Army and Navy arsenals also have a share in this work. The leading private establishments are as follows:—

Nakajima Aeroplane Works (Factories at Ota-machi, Gumma pref. and Ogikubo, Tokyo).

Mitsubishi Aircraft Works, Nagoya.

Kawasaki Dockyards (Hyogo Works), Hyogo, near Kobe.

Aichi Watch & Electricity Industrial Co., Nagoya.

Tokyo Gas & Electricity Industrial Co., Iriarai-machi, Tokyo.
 Ishikawajima Aeroplane Works, Ishikawajima, Tokyo.
 Kawanishi Aeroplane Works, Kobe.
 Ito Aeroplane Works, Tsudanuma, Chiba pref.
 Nippon Gakki Seizo Kaisha, Hamamatsu, Shizuoka pref.
 Fujikura Industrial Co., Osaki-machi, Tokyo.
 Tokyo E. C. Industrial Co., Setagaya-machi, Tokyo.
 Kikyu Seisakujo, Osaki-machi, Tokyo.
 Fukunaga Aeroplane Works, Shizuoka-ken.
 Fujisawa Denki Kogyosho, Tokyo.
 Japan Special Steel Co., Tokyo.
 Sumitomo Copper Works, Osaka.

Of the above establishments, the first eight undertake manufacture of flying machines and parts and motors, while the Nippon Gakki Seizo Kaisha specializes in propellers only and the last three in airships, balloons and accessories. There are also several other private establishments manufacturing parts of flying machines or various kinds of meters and gauges, etc., for use of aviators.

Aviation Activities in Recent Years

Picked by successive visits of European and American aviators on their round-the-world-flight since 1924, Japanese aviators, both military and civilian, have shown remarkable activity in 1924-25. First to mention in this respect was the successful flight made by our navy aviators from Yokosuka to Peking in May 1925. For Japan this was a memorable event, being the first sea-plane navigation achieved to foreign land. Far more ambitious undertaking in this field was the aerial visit to Europe across Siberia carried out by the enterprising Osaka and Tokyo Asahi in the latter part of July, '25. The two Asahi planes, Hatsukaze and Kochikaze (home built and fitted with 400-h.p. Lorraine Dietrich engines) piloted by Army flight officers Abe and Kawachi respectively, safely reached Moscow in the latter part of August. They further proceeded on their way and visited Paris on September 27, then London on Oct. 12 and Rome Oct. 27. The time required in covering 9,656 kilometres between Yoyogi and Moscow was 66 h. 30 for the Hatsukaze and 67 h. for the Kochikaze, the aviators stopping 16 days at various points en route. Below is given a brief account of aviation activities in 1927-28:

A Flight to the Kuriles.—Two hydroplanes of the Kasumigaura navy air corps started on a trip to Muroton Island of the Kuriles on April 29, '27. The program was to cover a distance of 1,970 sea miles in 6 days. The planes reached Hitokup of the group on the 4th day. Inclement weather interfering, the fliers

had to abandon further trip and returned to Kasumigaura on May 12, stopping 3 days at Hitokup.

A Yokosuka-Hokkaido-Maizuru Flight.—Two flying boats of the Yokosuka navy air corps, each manned by a crew of 7, carried out a long distance flight to the northern coast of Hokkaido on May 7-10, '27, covering a distance of over 1,600 miles in 4 days. The boats reached Akkeshi via Ominato on the 2nd day and returned to Yokosuka on the 6th day.

Sasebo-Taiwan Flight.—This was undertaken by three planes of the Sasebo naval air corps June 27—July 2, '27, covering a distance of over 2,000 miles in 5 days.

A Yokosuka-Bonin Flight.—This was the first non-stopping flight between the main island and the Bonins successfully carried out by two hydroplanes of the Oppama navy air corps on July 11, '27, the distance of 525 sea miles in 7 h. 40 m., i.e. at the speed of 68 miles per hour. The achievement was of great strategic value.

Passenger Carrying Planes.—3 passenger carrying Dornier planes (Comet type) built at the Kagamigahara aeroplane factory of the Kawasaki Ship Yards for the Asahi Shimbun were completed and one of them successfully made a trial flight in 2 h. 25 m. on July 3, '27, between Kagamigahara and Tokyo, 300 kilometres. The planes are equipped with 400 h.p. Lorraine motors and each accommodates 45 passengers. They were built for use in the Tokyo-Osaka passenger service.

Osaka-Shanghai Flight.—One of the Dornier all steel flying boats, built by Kawanishi Aeroplane Works for passenger service between Osaka and Oita of the Japan Air Transport Co. of Osaka, made a trial flight to Beppu (Kyushu) on July 12, '27, manned by a crew of 5, and carrying 14 passengers. The Company has purchased four Dornier machines of the same type which are the largest of the kind in Japan, being equipped with radio sets and other up-to-date fixtures, and each can carry 19 passengers.

Foreign Flying to Japan.—To return the visit of the Asahi planes to Moscow on their flight to Europe in 1925 a biplane of the Soviet Volunteer Aviation Association, manned by two aviators, Shostakov (pilot) and M. Pufalev (engineer), visited Japan in September '27. The Soviet fliers left Moscow in the afternoon of August 20 and hopping via Omsk, Kurgan, Novosibirsk, Krassnoyarsk, Irkutsk, Chita, Bragovestchensk, Spassk, Heljo and Okayama reached Tachikawa at noon September 1. The fliers covered the entire journey extending 1,497 miles in 66 h. 45 m., having met with no accident on the way.

Closely following the heels of the Soviet aviators, a Czechoslovak plane piloted by Lieut.-Col. J. Skala and accompanied

by his mechanic Taufer, visited Japan the same month. The Czech plane started from Prague two days before the Soviet plane left Moscow and reached Tokorozawa on September 4 completing a 10,000 kilometre trip after many difficulties en route.

On Sept. 14, '27, the naval air-port at Kasumigaura welcomed two American round-the-world aviators, Edward F. Schlee (navigator) and William Brock (pilot) who left Maine on August 26 on the monoplane *Pride of Detroit*, reached Shanghai on September 11, landing on the same day at Omura naval aerodrome in Kyushu. Then after the forced flight under stormy weather they reached the Kasumigaura air-port in the afternoon of Sept. 14, covering 26,000 kil. in 19 days. Their original plan to fly across the Pacific on their return trip had to be dropped for technical reason and they went home by a steamer.

The visit to Japan of the noted Italian explorer Major-Gen. Nobile and the equally famous Norwegian polar explorer Amundsen in the spring and summer of 1927 may be also mentioned.

Two French aviators Captain Costes and Lieutenant Lebriz arrived in Japan on Mar. 31, '27, with their plane on the way of a round-the-world flight. After staying about a week in Tokyo they started on their return flight to Paris leaving Tachikawa in the morning of April 8. The aviators safely reached Paris in the afternoon of April 14, covering the distance between Tokyo and Paris (14,800 kilometres) in 6 days 20 hours and creating quite a record. The Imperial Aero Association presented medals to the French aviators in honor of the successful accomplishment of their long flight extending 57,536 kilometres.

The 3rd civilian aviators contest was held at Yoyogi military grounds on Nov. 14, '27, under the auspices of the Kanto Aero Club. About 40 aviators participated in the contest. The winners were awarded with prizes presented by the Imperial Aero Association and the Communications Dept. The 1st, 2nd and 3rd prizes were won by K. Suzuki, T. Endo and S. Torii (1st-class aviators) respectively.

The 4th civilian aviators contest was held on July 12, '28, at Yoyogi grounds under the auspices of the Kanto Aero Club. The high altitude contest participated by 8 3rd class aviators (3 women) was won by T. Nakamura who attained a height of 3,150 metres. In the Tokyo-Osaka relay contested by twenty 1st and 2nd class aviators in four batches the 1st prize was won by Z. Fushimi, Y. Kumakura, T. Yokoyama and 2 others.

The 3rd aerial pageant was held at Yoyogi military grounds under the auspices of the Kokumin Shimbun on November 3 '27 day and night. The event was participated by about 15 civilian aviators, several flying boats, sea-planes and airships of the Navy air corps and over 20 Army planes.

Aviation Records

Principal records in altitude, speed, time, etc. established by the Japanese civilian aviators are given hereunder:

A record speed of 221.976 kilometres per second was created by the late aviator Nobuo Takahashi on May 21, '21, in a flight between Funabashi and Nokawa with a Shirado byplane equipped with a 180 H.P. Hispano Suiza motor.

A record altitude of 5,900 metres was attained by Hanji Noriji on June 2, '22, in a flight at Narashino with a Shirado byplane equipped with a 120 H.P. Lorraine motor.

A record non-stopping long flight in respect of duration (9 hours) was achieved by Ko Abe on May 12, '25, in a flight between Tachiarai and Morioka with a byplane equipped with a 400 H.P. Lorraine motor.

A record long flight in respect of both time and distance was successfully carried out by K. Abe and K. Kawachi on their memorable flight to Europe via Siberia with the Asahi planes Hatsukaze and Kochikaze in '25. The flight took 110 h. 56 m., the distance covered being 16,555 kilometres. Both machines (byplanes) were equipped with 400 H.P. Lorraine motors.

A record distance flight (non-stopping) covering 1,530 kilometres between Omura and Morioka was achieved by S. Nakao on May 26, '26, with a byplane equipped with a 450 H.P. Hispano Suiza motor.

A record long time flight (non-stopping) lasting 7 h. 1 m. was created by Uichi Suwa and another aviator on May 19, '27, in a flight between Otaru and Niigata, with a Kawanishi monoplane (260 H.P. Melbach motor).

A record long time flight (stopping) of 52 h. 19 m. was made by Nobutake Kaleda and another aviator in a round Japan flight from April 10 to May 25, '27, with a Kawanishi monoplane (260 H.P. Melbach motor).

A record long distance flight (stopping) of 4,823 kilometres was achieved with two Kawanishi monoplanes (260 H.P. Melbach motors) piloted by Nobutake Kaleda and Uichi Suwa respectively, in a round Japan flight carried out April 10—May 25, '27.

Aviation Toll of Death

From Oct. 1912 when the first fatal aviation accident befell our civilian aviator, at New York, till Aug. 1928, the toll of death demanded of our aviators numbered 230 besides three foreign fliers who were killed in Japan. Of the number the bulk were military or naval aviators and their assistants, the civilian martyrs numbering only 83.

CHAPTER X

RELIGION AND RELIGIOUS WORKS

Confucianism.—In the history of religion and religious beliefs in Japan, the first to be recorded is the introduction of Confucianism, taking this as a form of religious belief, in 285 A.D. in the reign of Ojin Tenno, according to ancient chronicle, though some authorities put the probable date of its introduction some 120 years later. As a system of secular moral teaching with no aid from aggressive propaganda, Confucianism met with no opposition from Shintoism, the native cult of ancestor-worship, also singularly devoid of evangelical zeal. The two could well exist together.

Shintoism.—See later:

Buddhism.—The next notable event in our history was the present of an image of Buddha and the sacred texts to the Japanese Court by a Korean King in 552 A.D. in the reign of Kimmel Tenno. Not long after, Korea sent Buddhist priests and nuns, as well as engravers of images and temple builders, and a regular movement of propagandism was started. This evoked strong opposition from the adherents of Shintoism till at last the trouble even developed into bloody strife between them and those who went over to the subtler and deeper teaching of the strange faith. The influence of Buddhism steadily gained ground and in the reign of the Empress Suiko (593-628 A.D.) Buddhism was elevated to the status of the state religion at the instigation of the Prince Imperial Shotoku who was a devout convert. What contributed far more to the spread of the Buddhist doctrines was the ingenious adaptation by the great Buddhist reformers Saicho and Kukai of the transmigration theory of Hinduism to the Shinto tradition. They were both despatched by the Court to China in 804 and returning home founded new sects acceptable to the general masses, Tendai owing its origin to Saicho and Shingon to Kukai. The Shintoist prejudice overcome by this clever conception, the two rival faiths were brought into a state of alliance, and for more than one thousand years till soon after the restoration of the Imperial regime, a hybrid form of religion, partaking of both Shintoism and Buddhism, known as Ryabushinto, was much in evidence throughout the land. Needless to state, the Buddhists managed to secure the lion's share in whatever benefit arose from this alliance.

Christianity.—Meanwhile, between 1549, when St. Francis Xavier landed at Kagoshima, and 1637 when the Shimabara rebellion was suppressed, Christianity as represented by the Roman Catholic missionaries had gained a great influence under the patronage of Nobunaga, the greatest military commander of the day, who tried by means of the newly introduced religion to curb the insolence of the powerful Buddhist communities entrenched on mountains standing near the Imperial seat of Kyoto. Nobunaga's successors, Hideyoshi and Iyeyasu, however,

adopted the contrary policy of persecution and prohibition, deported the Jesuits and their native followers to Java, and thenceforward Christianity was forbidden under penalty of severe punishment till the country was thrown open to foreign intercourse about the middle of the 19th century.

The part which the three religions played in the history of civilization and intellectual development of Japan in earlier days demands a brief explanation. In this connection the influence which Buddhism exerted can never be exaggerated. It may truly be said that the rise of Buddhism in Japan is so closely interwoven with the history of her civilization that it is almost impossible to treat the two separately.

Relative number of followers in Japan proper at the end of 1922.

Shintoism, 16,216; Buddhism, 48,420; Christianity, 212, all in thousand. Confucianism has no figure, as it lacks organization.

ADMINISTRATIVE CONTROL BY THE STATE

The State treats Shintoism, Buddhism and Christianity as they exist in Japan with equal tolerance and perfect fairness, strictly in conformity with the Constitution which guarantees absolute freedom of faith. The State therefore follows the policy of secular education. In administrative control also the same principle of indiscriminate fairness is acted upon and no difference is observed in the treatment of the three. However, the fact that Japan has not yet formulated special laws to deal with religious affairs is attended by some awkward consequences, though in practice this is more a matter of form than of substance. One of the most important points in this connection is that the Civil Code for allowing religious organizations to register themselves as a legal person does not cover Christianity though in point of fact this apparent discrimination is entirely immaterial, for the Code framers provided at the same time that the working of this provision would be determined by a Law of Religion, which still remains as a serious desideratum. A Shintoist or Buddhist temple, even when organized as a legal person has nothing to gain. On the other hand, Christian churches, as also other religious organizations, may participate in whatever benefit accruing from the acquisition of this particular legal status by having their boards of maintenance registered as a legal person. In 1919 Christian churches possessed 61 such persons, either as corporation or foundation, as against 71 for Buddhist and 4 for Shintoist. Then for administrative convenience official supervision is somewhat differentiated between the two older religions and their younger sister. A Shintoist or Buddhist sect is treated as a self-governing organization, for being constituted as a hierarchical entity it easily admits of such treatment, but Christian sects are entirely distinct in their constitution and preclude it. The consequence is that while the State leaves a duly elected patriarch, so to say, of such sect to take charge of its internal administration and requires him to draw up a constitution or to adopt other measures essential for self-government, in the case of a Christian sect what is required is simply to inform the local governor on matters relative to

propagandism, such as appointing preachers and establishing churches or similar places for purposes of missionary activity.

SHINTOISM

Shinto (The Way of the Gods), the indigenous cult of Japan that has existed from time immemorial, is essentially a system of nature-worship and ancestor-worship, with especial application to the rites and ceremonies performed to do homage to the Imperial ancestors among whom stands foremost the Sun-Goddess, the Great Ancestress of the Imperial House, and also to the spirits of warriors of worthy deeds and loyal subjects of renowned service. The ancestor-worship as practised by Shintoist devotees is confined to praying for the welfare of the Emperor, as they implicitly believe that the welfare of the Emperor is entirely identical with theirs. The idea comes from the orthodox tradition that as the Japanese nation is one huge family of homogeneous origin, the praying for its patriarchal chief the Emperor covers the whole people. Hence Shintoism is also called by some Mikadoism.

Cleanliness and Purity.—Purity and purification underlie all Shinto service, and hence with true Shinto believers cleanliness in body and heart is a cardinal article of faith. There are two purification ceremonies, one being *harai* or wind-purification and the other *misogi* or water purification. Washing of hands and, if possible, rinsing of the mouth, is thought necessary when one approaches a Shinto shrine for worship. Some zealots even carry this washing practice to the extent of bodily ablution. Death and blood are considered especially contaminating, hence Shinto priests formerly kept aloof from burial services. In the town of Yamada, the seat of the Great Shrine of Ise, dead bodies had to be carried out stealthily under the cover of darkness.

The same idea of cleanliness underlies the *shimenawa*, a straw festoon hung in front of Shinto edifices and similar places of worship for averting, according to popular superstition, pestilence. Another common symbol is the *gohei*, a rod supporting a tuft of cut paper or other things, such pieces of paper being often suspended from the *shimenawa*. The Shinto emblems jealously preserved in the sanctum are a mirror, a sword and curved jewels, after the Sacred Treasures of the Imperial Court. Shinto votives consist of products of the soil and the sea, an evergreen, sake and sometimes woven cloth.

Theologically Shintoism is very simple, for the only thing worth mentioning in this connection is that it believes in immortality of souls. It is devoid of dogma in the religious sense, and hence Shintoism is treated by religious writers as a cult distinct from Buddhism or Christianity. However, during the period of its subordination to Buddhism for about one thousand years, Shintoism acquired religious guise. It has given rise to a number of sects, for instance, this sectarian movement being of modern origin, and active even to-day.

Two Forms of Shintoism.—For administrative expediency Shintoism exists in two forms, i.e. Shintoism embodied in shrines as sacred structures for worshipping the Shinto deities and

standing aloof from all sects, and next, Shintoism existing as organized for a convenience of propagandism. The former is placed in charge of the Shrine Bureau of the Department of Home Affairs, while the latter comes under the Bureau of Religion, Department of Education.

The non-sectarian Shinto now forms an essential part of the general system of statecraft, and on all important occasions calling for august rites and ceremonies the service of Shinto priests is requisitioned. Of late Shintoism has grown quite liberal in its practices and it has become customary of late for Shinto priests to officiate in funeral services and also at marriage ceremonies.

SHINTO SHRINES AND THEIR "KEEPERS"

Classification of Shrines.—Shinto shrines are classified into seven grades, viz., the Jingu or the Great Shrine of Ise, Kampei or State shrines, Kokuhei or National Shrines, and Fu (prefectural), Ken (prefectural), Go (communal), Son (village) and Mukaku (unrecognized) shrines. The Kampei are subdivided into 1st class, 2nd class, 3rd class and special, and the Kokuhei into three classes. Of the 58 first class Kampei shrines the greater number are dedicated to the major deities of the age of gods and the rest to Emperors who generally figure on the pages of authentic history. The latest instance of the dedication of a 1st class Kampei-jinja is that of Taiwan-jinja founded in memory of Prince Kita-Shirakawa who died of disease in 1895 in Taiwan where he was sent to subjugate the rebellious natives, and the erection of Meiji-jingu in Tokyo in honor of the illustrious Emperor who died in 1912. It is interesting to note that all special Kampei-jinja are dedicated to loyal subjects though a certain two of them have a middle class shrine in their honor. There is no particular distinction between the Kampei and the other grade shrines as to the deities selected for worship, and some popular deities possess more than ten, 17 in the extreme case, Kampei or Kokuhei shrines maintained in their memory.

The Kampei and Kokuhei shrines form part of the regular mechanism of state, being maintained at the expense of the Treasury, but shrines of other ranks are under the care of local communities and parishioners. The offerings made on the occasion of regular festivals come from the Imperial Court in regard to the Kampei, and from the Treasury for the Kokuhei.

Keepers and Priests.—It is decidedly inappropriate to regard those on service at shrines of these two higher grades in the same light as priests of Buddhist temples or churches. The Government use the term shin-kan or shinto officers for those on duty at the Great Shrine and shin-shoku or shinto-functionaries for others attending the Kokuhei and lesser shrines. The shin-kan are under the Civil Service Regulations, and they and the shin-shoku of the Kokuhei shrines are appointed by the Government, but for shrines of lower rank the parishioners make the choice, subject to the approval of the supervising authorities. These latter are under the special appointment regulations and are required, among other things, to possess a

certain standard of knowledge in national literature and rites. Graduates of the National Literature Institutes, one in Tokyo and the other in Yamada, are qualified to become *shin-kan* or *shin-shoku*. The *shin-shoku* of Kokuhei-jinja, being treated as ranking government officials, receive emolument according to the special salary scale, but for those of humbler rank this question is to be arranged by the shrines they attend.

From what has been described above, it will be seen that those on service at non-sectarian Shinto shrines are quite different in their function from those at sectarian shrines. They are more properly ritualists whose business is to see to all matters relative to rites and festivals as well as the up-keep of their shrines. They keep proudly aloof from preaching and the work of propaganda which demand a deal of attention from the sectarian Shinto priests. Perhaps *shin-kan* and *shin-shoku* may better be called "keepers."

Shinto Sects

Thirteen officially recognized sects exist, and they all profess as a cardinal article of faith reverence to deities and observe precepts handed down by the "divine ancestors." The established Shinto sects are; Taisha (revived by Sompuku Senge, 1845-1918); Taisei (founded by Shosai Hiroyama, 1815-'90), Jikko (by Hanamori Shibata, 1809-'90); Kurozumi (by Munetada Kurozumi, 1780-1850); Shiuseiha (by Kunimatsu Nitta, 1829-'20); Mitake; Misogi (by Masakane Inouye, 1790-'49); Konko (Daijin Konko, 1814-'83); Tenri (by Mrs. Miki Nakayama, 1798-1887).

Shrines and Priests

	Great Shrine	State Shrine	National Shrine	Provincial Shrine	Communal Shrine	Village Shrine	Ungraded Shrine	Total
Shrines ... ('26)	1	112	78	857	3,501	44,972	63,188	112,709
Priests ... ('26)	73	470	250	1,184	3,260	8,568	910	14,715

BUDDHISM

Buddhism and Civilization.—The debt Japan owes to Buddhism, especially in early days, in the development of her civilization must be said to be incalculable. The study of the masterly specimens of sculpture, painting and architecture, as preserved in Nara and Kyoto, the treasures kept in Horyu-ji itself a splendid Buddhist structure, classical works of ancient writers, and so forth make one doubt whether without the help of Buddhism, accompanied as it was by the introduction of the material civilization prevailing in India, China and Korea, which were more advanced than Japan in those days, it would have been possible for Japan to attain such a high stage of refinement as she presented when she opened her doors to foreign intercourse. Further, Buddhism was a foster mother and guardian of learning when the country was torn by civil strife in the Kamakura and Ashikaga periods, supplied an inspiring factor in moulding the samurais' code of honor universally known as Bushido and has also deeply tinged our literature and art. The high priests of

ancient days guided the people and furnished models in matters of social welfare, taught them how to build roads and bridges, and introduced useful plants from China and Korea, for driven by their fervent desire to study the doctrine they dared even to face the perils of the sea and crossed to China in frail craft.

Buddhism and the Imperial Court.—During the period of its ascendancy Buddhism stood in high favor with the Court, reducing Shintoism and Confucianism to comparatively insignificant positions. Such close relation bound it with the Court prior to the Restoration, that Princes of the Blood were customarily installed as head priest at one or other noted monastery. At the time of the Restoration, the Prince-abbot of Ninna-ji, Kyoto, was ordered to return to secular life, and, as Prince Komatsu, was appointed a commander-in-chief of an Imperial army sent to subjugate the rebellious followers of the fallen Shogunate. Prince Kita-Shirakawa was also a Prince-abbot of Kan-ei-ji, Tokyo. It was in consideration of the past relation that the Court conferred titles of nobility on the chief abbots of the three headquarters of the Shinshu sect, when the peerage was instituted in 1884.

Buddhist Sects

The earliest Buddhist sects in Japan were all introduced from China during the Nara period, and these are Sanron, Hosso, Jojitsu, Kusha, Ritsu and Kegon. Of these only Hosso, Kegon and Ritsu have survived, though more as a relic of historical interest than religious sects of living force. As classical models of our ancient Buddhist architecture introduced from China and Korea, the existing temples of these time-honored sects possess inestimable value, these being, as head-temples of the Hosso sect, the celebrated Horyu-ji near Nara, Kofuku-ji and Yakushi-ji in Nara, the Todai-ji in Nara for Kegon, and Toshodai-ji in Nara for Ritsu. The rise of Tendai and Shingon which tried to reconcile the Buddhist doctrine with the Shintoist prejudice marks the development of Buddhism as a popular religion.

For about four hundred years till the rise of a military regency in Kamakura, the two sects swayed not only matters of religious belief but even secular affairs. Their headquarters, one on Mt. Koya and the other on Mt. Hiei, grew so powerful that they even defied the command of the central government. Corruption and degeneration soon followed and the two sects were reduced to a state of impotence and ineptitude. It was not long before the need for new faith was supplied by the rise of the Zen sect as introduced from China by Yetsai (1140-1215) and Dogen (1199-1253), and especially by the establishment of the Yuzu-nembutsu sect by Ryonin in 1117, the Jodo by Honen in 1174, the Shin by Shinran (1173-1262), the Nichiren or Hokke by Nichiren (1222-1281), and the Ji by Ippen (1239-1289). Of the above, the Zen stands apart as a doctrine that originated in China. It demands of its followers a certain form of bodily and mental discipline as a means of attaining enlightenment and found many zealous believers in those troubled days among warriors who were weary of a life of bloodshed and worldliness, and hence incidentally contributed to the development of Japanese knighthood commonly called **Bushido**. The Zen has

three sub-sects, viz., Rinzai, Sodo and Obaku, the last of which was introduced by a naturalized Chinese priest Yingen in 1653. The popularizing movement of the abstruse Buddhist tenets started by Saicho and Kukai was carried still further by Honen and his more famous disciple Shinran and by the fiery Nichiren. The latter two so far modified the teaching of Sakyamuni to adapt it to Japanese needs that there is hardly any similarity between them and Continental Buddhism. Shinran was really a radical reformer and an arch iconoclast. He discarded all ascetic practices such as celibacy and meat eating, and also the worship of the Buddhist images, with the exception of his own as an interpreter of Buddhist truths for all his faithful followers, and finally he denounced the current superstitions about days, directions, and so forth. The four sects of Zen, Jodo, Shin, and Nichiren practically divided the Buddhist world of Japan for about four centuries till the Restoration of the Imperial Government in 1868, the two other sects being of local importance. The long period of undisputed supremacy which Buddhism exercised over the spiritual and intellectual world sapped its sound growth, while the policy which the Tokugawa shogunate adopted of encouraging the Confucian cult as a moral guide for the samurai class robbed it of healthy stimulus. Degeneration and decay followed, and when, with the advent of the Imperial restoration, Japan began to introduce with feverish hurry the civilization of the West, Buddhist priests found themselves left behind in the forced march of the times. They lost touch with the general tendency of the new era with its novel requirements and strange culture. It was only when Japan, after some decades of this hurried transformation, called a halt at the bidding of nationalistic reaction, that Buddhism, already roused from its long torpor and now busy to regain self-consciousness, could recover its lost position to some extent. The Zen, Nichiren and Shin sects are most notable in this respect, and they can count among their followers both clergymen and laymen, some of the ablest thinkers of the day.

Buddhist Temples and Priests

Based on the report of the Department of Education:—

Temples	Tendai	Shingon	Jodo	Rinzai	Sodo	Obaku	
1924	4,513	12,127	8,313	6,777	14,209	523	
1925	4,511	12,112	8,313	5,978	14,217	523	
	Shin	Nichiren	Ji	Yuzu	Hosso	Kegon	Total
1924	19,677	3,850	491	357	41	27	71,317
1925	19,687	5,023	491	357	41	27	71,329
Priests	Tendai	Shingon	Jodo	Rinzai	Sodo	Obaku	
1924	2,729	7,385	6,747	4,593	12,060	344	
1925	2,729	7,435	6,719	4,590	12,042	344	
	Shin	Nichiren	Ji	Yuzu	Hosso	Kegon	Total
1924	16,000	4,134	364	224	15	20	54,619
1925	16,105	4,074	352	225	14	21	54,650

CHRISTIANITY

Early Christianity.—In less than a century ending in 1637, the Christian doctrine spread with such marvellous rapidity among the feudal barons and their retainers in Kyushu, to be propagated in time among higher circles in middle Japan, that the number of churches is recorded to have grown to over 250 and believers to more than 300,000. The misguided zeal of the Jesuits who tried to meddle with secular affairs and the sinister information laid before the Government by the Dutch traders in Nagasaki against the Portuguese missionaries resulted in the expulsion of the Jesuit fathers and the issue of an edict in 1613 prohibiting Christianity on pain of death. But there still remained a large number of native converts who secretly kept their faith. (See the Catholic Church below). These joined by ex-retainers of the fallen clans, 35,000 strong altogether, at last broke out into open rebellion at Shimabara in 1637. It was suppressed in the following year, and with the extermination of the rebels the cause of Christianity fell to the ground. It was not till 1873 that the prohibition was revoked.

The Revival.—It is interesting to note that Protestantism was the first to come into Japan after the seclusion policy had been given up. In the year following the ratification (1859) of the Treaty between Japan and America, the American Mission Board sent to Japan four pioneer missionaries, Brown and Hepburn in Kanagawa, Verbeck in Nagasaki, and Williams in Osaka. Soon they were followed by many others, including Drs. Thompson, Veeder, Greene and Davis.

Early Centers of Protestant Church.—The Brown's School at Yokohama, established by Rev. S. R. Brown, the Foreign Language School at Kumamoto in '73 by engaging Capt. Janes, U.S.A.; the Sapporo Agricultural College founded in 1876 by the Government by engaging President W. S. Clarke of Amherst Agricultural College, U.S.A.; the To-o-Gijuku School in charge of John Ing established about the same time at Hirosaki; the Fukui School under W. E. Griffiths, and Mr. Keiu Nakamura's Dojinsha, Tokyo, which engaged Rev. G. Cochran are reputed as having produced a large number of native Christians who have subsequently become celebrated in various fields of activity. The Doshisha founded in Kyoto by the late Rev. I. H. Nijima in 1875 played and still plays a prominent part in the propagation of the Protestant religion. In 1869 the first lady missionary in Japan was sent by the Dutch Reformed Church in the person of Miss Mary Kidder who opened a school for girls in Yokohama in 1870, the first institution of the kind in Japan.

In less than 30 years after the arrival of the American missions the Christian Church made a rapid progress, for though the effect of the suppression policy sternly pursued for more than two centuries could not be easily removed and the people at large still regarded Christianity with something of awe and horror, the trend of the times was on the whole propitious to the propagation of the Christian doctrines. The intellectual class, eager to introduce European civilization, was not slow to perceive the part which Christianity contributed in building it up. Even when not actually embracing it, these enlightened men were on the whole favorably inclined to its diffusion, and there

were many eminent thinkers and politicians who were converted into the new faith.

The expansion suffered a check towards the latter part of the 19th century, and its effect is still felt to-day. Various causes combined to account for this arrested progress, and among them may be mentioned the intense controversy that arose among the Christian members themselves on points of theology, the nationalistic reaction that was stirred up by the repeated failures in the solution of the long pending problem of Treaty revision, the sceptical attitude shown by a section of the intellectual class and also by the Educational authorities towards the cosmopolitan principle of Christianity, this principle being considered inconsistent with nationalistic ideas. It was then that not a small number of the native eminent Christian teachers deserted the Church.

The translation of the New Testament into the vernacular was completed in 1879 and of the Old Testament in 1886. The work was undertaken chiefly by Drs. Brown, Verbeek, Greene and Maclay with a number of native assistants among whom may be mentioned T. Matsuyama, M. Okuno, M. Uyemura, K. Ibuka, and some others.

Though outwardly Christianity is now making but little progress, there is no disputing the deep hold which its doctrine has upon the culture of the country. As Mr. K. Uchimura, one of the foremost non-church Christians of Japan, wrote in 1920, "There are scarcely any newspapers, magazines, stories or novels free from the influence of Christian thought. To say nothing of love and liberty, such ideas as humanitarianism and labor are derived either directly or indirectly from Christianity. It is clear that they are not derived from Buddhism or Confucianism. Not only apostates, but also not a few earnest Christians are actually leading the world of Japanese thought. In this way Christian ideas have influenced and are influencing Japan through Christians both genuine and apostate, and no one can deny this influence." On education, especially the education of girls, Sunday-school endeavors, the systematic charity for reforming depraved children, protecting ex-convicts, as well as temperance and purity campaigns, and so on, the Christian Church has set an example for Buddhist and Shintoist sects to follow.

Roman Catholic Church.—It revived activity in 1844 when a French priest Fr. Forcade of the Society of the Foreign Missions of Paris established himself at Naha, Luchu Isl. He was appointed Vicar Apostolic of Japan in 1846. In 1859 arrived other priests in Yokohama, Nagasaki and Hakodate. In 1862 a church was opened in Yokohama and when in 1865 another was established at Nagasaki a remarkable incident occurred. About a month after its opening some 3,700 villagers living near the city, who were secretly professing the faith as handed down from their forefathers, came to the church and openly declared themselves Christians, to the utter amazement of the local authorities, for the ban against the religion was still in force technically. This faithful group, thoroughly indigenous and intensely Catholic, formed the nucleus of the existing Catholic Church of Japan. Though less numerous than in the period before the great Tokugawa persecution, it is more completely

organized and better equipped for all Christian activities than it was during the most flourishing days in the seventeenth century. The union with the Center of Christendom is emphasized by the presence of an Apostolic Delegate, at present the Most Reverend Archbishop Giardini, resident in Tokyo, while the hierarchy consists of the Archbishop of Tokyo, the Rev. Jean Alexis; the Bishop of Osaka, the Rev. J. B. Castanier; the Bishop of Fukuoka, the Rev. Fernand Thiry; and the Bishop of Nagasaki, the Rev. Januarius Kyubel Hayasaka. This last is the very first native Bishop and was consecrated quite exceptionally by the Pope Pius XI himself in the Basilica of St. Peter, Rome, on Oct. 30, 1927. Besides there are Apostolic Prefects the Rev. W. Kinold, O.F.M., for Sapporo; the Rev. Antonius Ceska, S.V.D., for Niigata; the Rev. J. Reiners, S.V.D., for Nagoya; the Rev. J. M. Alvarez, O.P., for Tokushima; the Rev. Egide Roy, O.F.M., for Kagoshima. The diocese of Hakodate is administrated temporarily by the Rev. Alfred Joseph Hutte and that of Hiroshima by the Rev. Ross, S. J.

Under this hierarchy, a carefully trained body of five Japanese priests, cooperating with about 250 Foreign Missionaries, 300 religious men and 700 women drawn from nine European and two American nationalities as well as Japan, are carrying on the work of propagating and cultivating the faith planted in the 16th century. All parish priests employ the indispensable and invaluable aid of Lay Catechists for the Sunday School, as is the case the world over. Seven Orders of religious men and eleven Orders of religious women (Sisters) maintain various works of charity and education. There are besides three entirely Japanese Sisterhoods, i.e. Bernadette Kai in Hakodate, Selshin-Aishi Kai in Akita, and Hômon-Aiku Kai in Omori, near Tokyo. The Leper Asylum at Koyama, maintained almost single-handed by the Rev. Drouart de Lezey of the Paris Foreign Mission Society and that near Kumamoto conducted by the Franciscan Missionary Sisters of Mary, are noteworthy. Dispensaries and day nurseries are conducted by Sisters in Tokyo and other cities; general hospitals are managed by Sisters in Kanazawa and Sapporo; orphanages in Tokyo, Yokohama, Osaka and Nagasaki.

Christian education for girls was begun in 1873 by the Sisters of St. Maur, who now have large Academies in Tokyo, Yokohama and Shizuoka. They were followed in 1877 by the Sisters of the Infant Jesus who have schools at Osaka, Kobe, Kyoto, Nagasaki and Kumamoto; in 1878 by the Sisters of St. Paul of Chartres who have schools at Hakodate, Tokyo, Sendai, Morioka and Yatsushiro; by the Sisters of the Sacred Heart in 1908 who conduct an Academy and Normal School in Tokyo and Sannomiya, Kobe. Moreover the Franciscan Sisters of St. George has an Academy in Sapporo, the Sisters Servants of the Holy Ghost in Akita, the Sisters of Charity of Nevers in Osaka, the Sisters of Our Lady of Namur in Okayama, the Tertiary Dominican Sisters in Matsuyama, and the Sisters of Mary Immaculate of Canada in Naze, Amami-Oshima.

The education of boys was begun in an organized way in 1888 by the Marianists who have Middle Schools in Tokyo (1888), Nagasaki (1891); a Commercial School in Osaka (1898); a College for Foreign Boys in Yokohama (1901) and a Missionary Training School in Nagasaki (1888). Their students number in the aggregate more than three thousands.

The Catholic University was, at the instance of Pope Pius X, inaugurated in Tokyo by the Jesuits who returned to Japan on Oct. 17th, 1908, after an absence of two hundred and seventy years. The traditional system of education has been modified for this institution to suit local conditions and the training is concluded with the course in Scholastic Philosophy characteristic of Jesuit Universities in Europe and America.

The contemplative life is represented in Japan by the monasteries of Trappists in Hokkaido and Kyushu and that of Trappistines near Hakodate where the Benedictine tradition "work and pray" offers an object lesson deeply appreciated by the Japanese to whom monastic ideals have been familiar ever since the introduction of Buddhism. Catholic journalism is well represented in Tokyo, Osaka and Sapporo.

The total Catholic population of Japan is about 90,000; the number of candidates for baptism is a varying quantity of which no satisfactory estimate may be hazarded.

The appeal of Catholicity to the Japanese mind seems to be its thoroughly international and hence non-political character as evidenced by the above outline, its definite body of dogma with clear-cut answers to the questions proposed by an inquiring mind and its compact and authoritative discipline.

Catholic work in the Pacific Islands subject to the Japanese Mandate has been in the hands of the Spanish Jesuits since the Japanese Government assumed the responsibility. These Missions have an Agent resident at the Catholic University in Tokyo who arranges for their temporal affairs and their relations with the Imperial Government. Propaganda and education are the outstanding features of the work. Catholics there number about fifteen thousand.

The Catholic Missions of Formosa are directed by the Spanish Dominicans who have eleven priests and six Sisters working there. Catholic population is about 5,000.

Korea has a hierarchy of Bishops with sees at Seoul, Taiku and Wonsan. There are 87,000 Catholics in the peninsula.

Statistics of Some Leading Churches in Japan for 1927

	Foreign workers	Japanese workers	Communi- cants	No. of chapels	Head- quarters
Roman Catholic....	218	61	77,191	194	Omori, near Tokyo.
Russian Orthodox..	1	151	74,206	114	Kanda, Tokyo.
Japan Christ	75	393	30,852	288	Akasaka, Tokyo.
Japan Congregational	28	124	20,885	133	Nakanoshima, Osaka.
Japan Episcopal ..	114	246	20,200	219	Ochiimura, near Tokyo.
Japan Baptist	8	94	4,785	69	Kanda, Tokyo.
Japan Methodist ..	142	265	23,136	219	Aoyama, Tokyo.
Salvation Army ...	4	103	9,045	78	Kanda, Tokyo.
Total including others	689	1,667	219,860	1,568	

Besides there was in 1925 an enrolment of 246,790 in 4,148 Sunday Schools, the number of officers and teachers being 18,032.

CHRISTIAN INDEPENDENCE MOVEMENT

A movement has recently appeared among Japanese Christian churches with the object of severing financial and other connection with the foreign mission boards, mostly British and American, and to take a free hand in their evangelistic work. This independence movement, it is significant to say, was voiced first immediately after the enforcement in 1924 of the new anti-Japanese immigration legislation in America, and has fast gained ground, meetings of influential Japanese Christians, exclusive of those of the Roman Catholic and Russian Orthodox churches, having since been held in Tokyo to discuss the ways and means for carrying the movement to realization.

Three of the four largest Japanese churches are altogether independent, they being the Nihon Kurisuto Kyokai (Japan Christ Church), the Kumiai (Congregational Church) and the Nihon Mesojisuto (Japan Methodist Church). There is a place for the missionaries in these churches, but not above that of their Japanese fellow workers. They are absolutely self-governing churches. But foreign mission boards are in some cases making annual grants of money to carry on the work of these churches, so that while the churches are self-governing they are not altogether self-supporting. Leaders in some of these churches have been working towards absolute financial independence also. The agitation regarding the anti-Japanese immigration legislation in America in 1924 has intensified this desire. In the Nihon Mesojisuto Kyokwai, for instance, the Dendokyoku of that church, which has been receiving an annual subsidy from the American churches, is planning, in consultation with the American missionary societies, to become financially independent organization, and the societies will give probably a farewell gift of ¥150,000 to the Dendokyoku to help its achieving this ambitious scheme. This will not change the relation of the missionary to the work; it simply means that the native churches would no longer be dependent upon direct monetary aid from abroad. The missionary, however, will be supported from abroad for his work, which will be complementary to that of the native churches. The present movement, as described, is approved by the missionaries and the mission boards they represent. It is essentially aimed at financial independence. There may be sporadic cases where the movement results in a separation of the individual church from its former mission relations, and there are, indeed, cases where financial stringency in a foreign mission board has caused the withdrawal of missionaries.

A similar movement has been started in Chosen recently, and already the American Presbyterian mission board has decided to discontinue sending its missionaries to Chosen, and to leave the evangelical work entirely to the Japanese and native workers there.

Young Men's Christian Association.—Planted first in 1880 at Tokyo, the Association has spread steadily and now there are 28 regular city Associations having a total membership of 10,846 and 82 student Associations with about 5,827 members. The secretarial force numbers 62 Japanese and 14 American and British. The current budgets of the local associations and of the National Committee aggregate ¥480,000 annually, nearly all of which is

raised in Japan. The material equipment owned by the Association includes 23 student buildings, 14 city work buildings and a modern summer conference plant at Gotemba, the total value amounting to ¥1,222,125.

The Japanese associations are organized along lines similar to those in the United States, Canada and other lands. The work is divided into religious, educational, social, hostels, industrial, physical and employment departments. The chief divisions are students, city, boys' work and army, with affiliations with other organizations conducting similar work for railway men. The popularity of the Association work is attested to by a recent Imperial gift in recognition of the army work, another Imperial gift to the Tokyo City Association in recognition of its employment bureau service and a gift of ¥50,000 by the South Manchuria Railway Company for additional equipment for the Dairen City Association. There are about 8,000 students in the educational departments of the city associations which have united in a "United Y.M.C.A. Schools" movement which has won deserved recognition from educational authorities.

The National Committee of the Association consists of 50 representative Christian laymen of whom one-third are prominent business men, one-third teachers and Association secretaries and one-third are undergraduate students of the colleges and universities of the country.

Young Women's Christian Association.—The National Committee of the Young Women's Christian Association of Japan was organized in 1904. At present there is a total membership of 6,500 belonging to 5 city Associations, 9 student Associations and 21 high school Associations. The National Committee owns and maintains a conference site at the foot of Mt. Fuji near Gotemba, where summer conferences are held during July and August, with an approximate registration of 600 for 1926. The official organ of the national organization is a monthly publication named the "Young Women of Japan" (*Joshi Seinen Kai*). The promotion of international understanding and good-will through the service called "friendly relations" is one of the activities of the National Committee, and is centered largely in Nitobe House in Tokyo. The City Associations are in Tokyo, Yokohama, Osaka, Kyoto and Kobe. Their activities are, in general, educational classes in English, Home Economics and Business; Bible classes and Religious work; Self-governing clubs among students, high school girls, girls in factories, shops and offices, girls of leisure and young married women; physical education, etc. Tokyo, Yokohama and Osaka have boarding homes for Japanese girls. The Chairman of the National Committee is Mrs. Matsu Tsuji and the national headquarters are at 8 Nishiki-cho Itchome, Kanda, Tokyo.

National Temperance League of Japan.—The temperance movement in Japan was first started in 1886 by S. Hayashi in Yokohama, K. Ito in Sapporo, T. Ando and S. Nemoto in Tokyo. In 1920 the present National Temperance League of Japan was formed by fusion of minor bodies. It is a rather loose federation. The league now comprises 283 local societies with an aggregate membership of some 25,000. Mr. Nemoto's Juvenile Temperance Bill introduced for the first time in the Diet in 1901 was at last approved in the 1921-22 session and promulgated as a law in

April 1922. The Board of Directors consists of Messrs. H. Nagao (Chairman), S. Aoki, K. Ito and 12 others. (Headquarters, 19 Omote Sarugakucho, Kanda, Tokyo).

Women's Christian Temperance Union of Japan.—(Kirisuto-kyo Fujin Kyofu Kwa).—Organized in 1886, this body represents Japan's contribution to the work of the World's W.C.T.U. or White Ribbon Society. At the close of 1925 members numbered 7,500 with 154 societies throughout Japan. The W.C.T.U. has devoted itself eagerly to the work of social reform of women, and maintains the Woman's Home at Hyakuninmachi, Okubo, Tokyo, for the reform of abandoned women and girls. Besides working for the same cause there are 14 societies for young women with 700 members and 38 for juvenile with 18,000 members attached to the W.C.T.U. President is Mrs. Chiyo Kozaki. Office is at 360 Okubo Hyakuninmachi, Tokyo.

The Salvation Army.—The Salvation Army commenced its work in Japan in September 1895. The Corps & Societies now number 112. Many well established Social Service Institutions are doing a very much needed and useful work. These include 3 Women's Rescue Homes, 3 Workmen's Homes, 2 Discharged Prisoners' Homes (with which is incorporated a section for probationary offenders), a Night Shelter for Men, Children's Homes, a Sanatorium for Consumptives, a Social Settlement, 2 Slum Posts, a Day Nursery and a Dispensary with medical and dental clinic pending the erection of the new hospital to replace the one destroyed by the earthquake of 1923. Other agencies embrace Police Court and Prison Visitation, Free Cessation and Advisory Departments, Labor Bureau, Work for the Blind, Prevention of Cruelty to Children, &c. The Emperor Meiji made an annual donation of ¥1,000 for a period of 10 years towards the Army's social work, while a donation of ¥3,000 was granted to the same funds in the joint names of the Emperor and the Empress. In connection with the Coronation Honors the Blue-Ribbon Medal was bestowed upon Lieut. Commissioner Yamamuro, the Chief Secretary, in recognition of the beneficent work of The Salvation Army, with which he has been connected as an Officer for about 30 years. The Empress Dowager sent her chamberlain to inspect The Army's Hospital for the Poor on her behalf. Government grants are also received towards the maintenance of several of the social agencies.

The Sanatorium for consumptives at Nakano, Tokyo, which was erected in 1916 as a memorial to the late founder of the Army, is regarded as one of the most efficient in Japan, it accommodating 170 patients. During the past three years the Army has rebuilt the old wards, and built and opened two modern and up-to-date wards and doctors quarters, thus greatly increasing the accommodation and efficiency. Toward the cost of increased accommodation the Imperial Government has since granted a considerable sum of money. The splendid organized relief work following upon the disastrous earthquake of 1923 served to emphasise not only the worth of the Army's work, but to exhibit its disinterested and unstinting love and care for the welfare of the people of all classes, but particularly the poor.

In the Officers' Training School nearly 50 young men and women are in residence preparing for Salvation Army officership, and all but 21 of over 370 Officers, Cadets and Employees are

Japanese. Five captains, three male and two female, and one Lieutenant were sent to London for training in 1925.

The National Headquarters at Hitotsubashi-Dori, Kanda, Tokyo, which was completed in the autumn of 1920 at a cost of ¥225,000 and in which were the administrative offices and a large auditorium, was destroyed in the earthquake. A new building erected on the site of the former premises was completed in May 1928.

General William Bramwell Booth, eldest son of the Founder and present head of the Salvation Army, visited this country in 1926 and during his stay here Lieut. Commissioner Yamamuro was appointed by the General as the leader of the Salvation Army in Japan as successor to Commissioner Eadie. General Booth was, during his visit here, received in audience by the Prince Regent at the Akasaka Palace and afterwards was recipient of a substantial cheque for the Army's work from the Imperial Household.

CHAPTER XI

EDUCATION

I. INTRODUCTORY REMARKS

History.—Principal landmarks in the history of education in Japan prior to the Restoration of 1868 are the introduction of Chinese classics in 184 A.D., sending of scholars to China for study from 607 to about 900, publishing in 712 of the oldest book extant "Kojiki," introduction of the art of printing in 770, invention of the Japanese alphabet in 809, rise of vernacular literature in the Nara and Heian periods, lady authors and poetesses taking conspicuous part, relegation during the feudal period of literature to position entirely secondary to martial arts and as an accomplishment fit only for priests, courtiers, and other non-military classes.

With the establishment of the Tokugawa Shogunate learning somewhat revived, but it was far from being universal, and of course the education of girls was left sadly neglected. The subjects taught to boys were Chinese classics, history, laws, mathematics and Japanese literature. The plebeian class was contented with acquiring the knowledge of the three R's.

It must be noted that the real educational system dates from the Restoration, when class distinction was abolished and equal opportunity opened to all classes. The Imperial Rescript promulgated in 1872 enjoined that "henceforward education shall be so diffused that there may not be a village with an ignorant family, nor a family with an ignorant member." The public school system put in force in the same year was based upon the French model and the whole country was divided into eight educational districts, each to establish one university, 32 middle schools and 6,720 primary schools. The plan was premature, and was recast in 1879 at the advice of Dr. David Murray, an American educationist who was adviser to the Ministry of Education from 1875 to '97. Space forbids to review the revision subsequently effected. It may be broadly stated that since the Japan-China war ('94-5) the question of girls' and technical education, relatively neglected up to that time, has come to the front, while the world war has democratized the educational system and principle.

Religion at Schools.—A secular system is strictly maintained at all public and Government establishments, though private schools are at liberty to include religion in their curriculum, and are moreover allowed to participate in the privilege of conscription service postponement, provided they are of a standing at least equal to the Middle Schools. When, however, such schools wish to participate in other privileges, such as eligibility to the junior civil service, or to style themselves Middle Schools they must strictly conform to the Middle School Regulations in which

religious teaching of all descriptions in the class room is excluded. Of late the authorities seem to have conceived the idea of bringing education and religion into closer contact. The transfer of the Religion Bureau from the control of the Home Office to that of the Department of Education is one of such signs.

Discipline at Schools.—The introduction of the Occidental system of learning and the displacing of the venerable teachers of the old system with younger teachers devoid of prestige have resulted in undermining the laudable custom of mutual confidence that formerly bound master with pupils. The consequence is lax discipline and repeated outbreaks of strikes chiefly on the alleged ground of incompetence of principals or teachers or on other plausible excuses. Happily these refractory occurrences are now gradually lessening.

Educational Reform and Expansion.—The reform effected in 1916 will remain memorable in the history of education. First it has shortened by one year the number of years boys had to spend to complete the university education and next, which is of far more consequence, it means the adoption of democratic principles and liberal spirit as regards the treatment of high and university institutions, both State and private schools being given practically the same status, etc. At the same time the Government decided with the approval of the Diet in 1919 to effect expansion so far as the finances of the State admitted. The measure included establishment of 10 high schools, 17 industrial and 2 special schools in 6 years beginning with 1919, as well as expanding the scope of the existing schools. With the completion of the scheme the Government high schools increased to 25, higher industrial schools to 42, including 10 agricultural, 20 technical and 12 commercial schools. Of the Government special schools those specializing in medicine were all elevated to the status of university.

Co-education.—In the higher seats of learning it is only at the Tohoku and Kyushu Imperial Universities, the Tokyo Academy of Music, and Toyo University that the system receive regular, though still scanty, attention, owing to limited number of applicants. The Tokyo Imperial and Waseda Universities also admit a few women as hearers.

Military Training in Schools.—From the new academic year beginning April 1925 military training was introduced into the regular curriculum of secondary grade schools, the law for the purpose having been passed in the 50th session of the Diet. For universities or others of similar rank the measure is optional. Altogether over 1500 Government and public institutions come under the new system apart from ranking private schools for which it is left to free choice. The military drill is given 3 hours per week at Normal schools, 2 at Middle, High and Special schools, besides four or five days' field exercise. For those boys who pass the examination in practice the term in barracks will be shortened to five months for the Normal school boys, one year for Middle school boys, and ten months to those of High and Special schools. The educational authorities are contemplating to place boys in general under the same system. (Vide Chap. Army and Navy.—Ed. J. Y. B.)

**General Statistics of Educational Institutions in Japan Proper
for the Year 1925-26**

Elementary Schools	No.	Instructors	Enrolment	Graduates
Government	4	87	2,377	435
Public	25,346	208,990	9,158,831	1,766,758
Private	109	817	27,352	3,810
B. D. D. Schools				
Government	2	63	462	109
Public	44	325	3,140	479
Private	67	360	2,114	392
Normal Schools, Public....	99	2,367	45,540	14,053
Higher Normal Sch., Govt...	2	199	1,730	412
Do. for Girls, Govt...	2	107	826	184
Teachers' Institutes, Govt...	11	300	1,172	592
Middle Schools				
Government	2	58	880	118
Public	404	9,325	237,093	28,819
Private	96	2,365	58,838	8,895
Girls' High and Domestic High Schools				
Government	3	54	1,344	313
Public	618	8,668	225,004	50,367
Private	185	3,321	75,099	14,964
High Schools, Government...	25	1,035	15,796	4,396
Do. Public	1	38	236	—
Do. Private	3	90	810	91
Universities, Government ..	11	2,016	18,423	4,409
Do. Public	4	245	2,122	494
Do. Private	19	1,950	27,140	7,021
Special Schools (collegiate)				
Government	7	307	3,733	938
Public	3	60	702	193
Private	75	3,413	48,445	9,797
Technical Schools (collegiate)				
Government	44	1,642	16,870	3,396
Public	2	72	1,036	283
Private	4	81	920	215
Do. (Secondary grade)				
Government	2	11	104	32
Public	678	8,352	165,688	27,086
Private	117	2,291	47,075	10,111
Supplementary Technical Schools				
Government	4	—	844	495
Public	15,258	9,625	1,046,576	333,435
Private	54	196	4,017	1,389
Training Institutes for Tech- nical School Teachers, Govt.				
Government	4	—	366	114
Do. Public	40	68	1,043	869
"Other" Schools, Public....				
Government	326	456	19,588	6,929
Do. Private	1,437	13,660	216,352	87,603
Total	45,111	281,625	11,474,253	2,400,860

Note 1.—Teaching at the Training Institutes of Technical School Teachers and at supplementary schools is undertaken by those specified higher schools to which they are generally attached.

Note 2.—Schools and Colleges under control of Departments other than the Educational, i.e. Fishery Institute, various military and naval schools and colleges, Peers' School, Peeresses School, Post and Telegraph Schools, are excluded.

Note 3.—"Other" Schools include various schools and colleges that are not recognized by the Government as such.

II. PRIMARY EDUCATION

A. ELEMENTARY SCHOOLS

Schools of this grade are divided into ordinary elementary schools and higher elementary schools, both being generally combined. The ordinary elementary school course extends six years and is compulsory, and the higher elementary school course two or three years. The ordinary elementary school receives children of 6 to 14.

Besides ordinary subjects of study the curriculum includes English in the higher course for urban districts. Under the existing regulations text-books for most subjects are compiled by the Education Department and published by the appointed publishers.

In principle elementary education is gratuitous, but according to the local circumstances a small amount of tuition may be charged under special permission.

General Statistics of Elementary Schools (Mar. 1926)

No. of Schools	Gov't.	Pub.	Priv.	Total	Mar. 1925
Ordinary	—	7,737	85	7,822	8,173
Higher	—	158	—	159	165
Ord. & High. Combined	4	17,451	23	17,478	17,147
Total	4	25,346	108	25,459	25,485
No. of Teachers	Gov't.	Pub.	Priv.	Total	Mar. 1925
Ordinary, Male	63	111,614	509	112,186	110,155
Do. Female	12	65,490	260	65,762	63,956
Higher, Male	10	28,304	31	28,345	27,193
Do. Female	2	3,582	17	3,601	3,383
Total	87	198,990	817	209,894	204,785
No. of Pupils	Gov't.	Pub.	Priv.	Total	Mar. 1925
Ordinary, Boys	1,082	4,049,286	13,701	4,064,069	4,085,387
Do. Girls	1,086	3,902,708	12,505	3,916,299	3,920,832
Higher, Boys	92	765,540	747	766,379	753,765
Do. Girls	117	441,297	399	441,813	428,361
Total	2,377	9,158,731	26,352	9,188,560	9,188,345
No. of Graduates	Gov't.	Pub.	Priv.	Total	Mar. 1925
Ordinary, Boys	183	656,294	1,864	658,341	635,559
Do. Girls	166	609,931	1,494	611,591	586,637
Higher, Boys	38	323,599	299	323,936	311,003
Do. Girls	48	176,934	153	177,135	165,259
Total	435	1,766,758	3,810	1,771,003	1,698,458

**Number of Children of School Age under Obligation
to attend Schools**

End of March	Receiving the prescribed course of instruction			Not receiving the prescribed course of instruction		
	Boys	Girls	Total	Boys	Girls	Total
1924	4,708,363	4,460,528	9,168,891	27,846	36,854	64,200
1925	4,734,699	4,512,441	9,247,140	32,422	38,878	71,300
1926	4,725,370	4,533,875	9,259,245	25,106	28,166	53,272

Continued	Total no. of children under obligation			Percentage attending schools		
	Boys	Girls	Total	Boys	Girls	Total
1924	4,736,209	4,486,882	9,223,091	99.32	99.15	99.23
1925	4,793,315	4,580,952	9,374,267	99.49	99.35	99.42
1926	4,750,476	4,562,041	9,312,517	99.47	99.38	99.43

Blind, Deaf and Dumb of School-Age.—Blind or mute children of school-age and their ratio per 1,000 of normal children of the same age-limit are shown in this table.

End of March, 1925	Blind and mute of school-age			Receiving instruction at schools			Defectives per 1,000 normal children
	Boys	Girls	Total	Boys	Girls	Total	
Blind	1,441	1,350	2,791	230	92	322	0.26
Deaf & Mute	3,413	2,902	6,315	608	415	1,023	0.59

B. KINDERGARTENS

By the enforcement of new regulations in April 1926, kindergartens were legally separated from elementary schools and made an independent unit in the system of education. They admit children from 3 to 7 years of age and aim at supplementing home education of the little ones. The subjects taught are play, singing, observation, speaking and manual work. The new regulations create a certificate for conductors, and every establishment must have those qualified numbering more than half the staff. The enrolment is limited to 120 at one kindergarten, and to 200 when specially approved by the authorities. The number of pupils under the charge of a conductor should not exceed 40.

End of March, 1926	No. of kindergartens	No. of conductors	No. of children
Government	2	9	389
Public	347	1,140	41,998
Private	608	1,676	40,834
Total	957	2,825	83,221
Total, March 1925..	847	2,464	71,638

C. BLIND, DEAF AND DUMB SCHOOLS

There are at present two government institutions and 78 public and private schools as mentioned elsewhere. In conducting public and private B. D. D. Schools the regulations relating to Elementary Schools should be applied mutatis mutandis. The two government schools are as follows:—

The Tokyo Blind School.—The school system is divided into three, ordinary, professional and normal courses. In the ordinary course instruction is given in the Japanese language, arithmetic, conversation and gymnastics, and in the professional course, music, acupuncture and massage.

The Tokyo Deaf and Dumb School.—The school system is also divided into ordinary, professional and normal courses. The ordinary course includes reading, writing, composition, arithmetic, written composition, written conversation; the industrial course, drawing, carving, joinery and sewing. Pupils in the ordinary course are allowed to study one or two subjects of the industrial course on the application of their parents.

The latest available data for this branch of education are given below:—

End of March 1926	No. of Schools			Pupils		Graduates	
	Blind	Mute	Teachers	Blind	Mute	Blind	Mute
Government	1	1	51	192	270	56	53
Public	25	19	295	1,545	1,595	308	171
Private	47	20	370	1,322	792	330	62
Total	73	40	718	3,059	2,657	694	286
Total, March 1925.....	77	38	667	2,995	2,450	519	233

III. SECONDARY EDUCATION

A. MIDDLE SCHOOLS

A school of this grade teaches boys who are desirous of entering higher institutions or who are intended for active life. A graduate of a Middle School is privileged to become a clerk in the Government service without undergoing the civil service examination. The course of study extends five years and a boy who has finished six years of the primary school education is qualified, theoretically, to enter the school on diploma. But in practice, owing to the number of applicants the boys are obliged to undergo selective examination at most schools, only about 10 per cent. of the number of qualified applicants being admitted according to recent experience.

With the enactment of the new regulations for Universities and High Schools the course has been shortened practically by one year, for boys finishing the fourth year are now privileged, on examination, to enter the High Schools.

Restriction as to Number of Classes and School Days

The regulations restrict the number of boys in each Middle School to the maximum limit of 800, to be increased to 1,200 in 1921, and that of boys in each class to 50. School days must not fall below 220 days per annum, though for 5th year boys the number of days may be shortened to 200.

Reform of Language Teaching

The question of reform in the teaching of English in Japan is now being very seriously considered and there is a general

feeling that the system now in force might be improved. Mr. H. E. Palmer, Lecturer in Spoken English, University College, London, and in Methods of Language Study, School of Oriental Studies, London, arrived in Japan in April 1922 and is attached to the Department of Education as Linguistic Adviser. He is a well known expert in Phonetics and modern methods of teaching spoken languages, and is now studying the situation with a view to elaborating a scheme of reform appropriate to the aims of English study in this country.

B. GIRLS' HIGH SCHOOLS

The course of study of high schools for girls extends over four years, but may be extended a year. In addition to general course, supplementary courses not exceeding two years may be provided. For the benefit of those desiring to study such arts as are necessary for females, a domestic course extending over not less than two and not more than four years may be established either in the curriculum or as a special school devoted to the same subject. A higher course of three years may also be provided for the benefit of those who having finished the general course desire to pursue further study. At present this course exists in First and Third Tokyo Prefectural Girls' High Schools, and five other prefectural and one private girls' high schools.

Statistics of Girls' High Schools

Number of girls attending the Girls' High Schools and Girls' Domestic High Schools is as follows for the year ended March 1926:—

	Regular course	Domestic course	Higher course	Post- graduate course	Elective course	Supple- mentary course
Government ..	915	270	—	148	—	11
Public	197,029	22,390	951	935	519	3,180
Private	68,548	5,546	49	332	62	562
Total	266,492	28,206	1,000	1,415	581	3,753

C. HIGH SCHOOLS

As originally constituted, High Schools are places primarily for giving special or professional education and secondary preparatory education for those desirous of entering Universities. The primary object has been lost sight of and at present High Schools are mostly institutions where students wishing to enter a University have to study for three years.

According to the new regulations for Universities and High Schools as enacted in April 1919, the High School consists of two courses, the Ordinary (4 years) and the Higher (3 years). The Higher course may admit those who have finished the 4th year of the Middle School, the 1st to 4th year course of this latter corresponding to the Ordinary course.

For reasons given above the government High Schools (except one) have only the Higher course, and those who have finished it are matriculated at the Imperial Universities.

The Higher course is divided into two departments, Literary and Scientific. The necessity of making the students learn two Occidental languages, English and German or French, having been judged disadvantageous, it was arranged in 1911 to make one language compulsory and the other optional, the choice being left to the students.

List of High Schools

(with latest available figures)

Government High Schools

	Director	Faculty	Students	Graduates	Admission
1st (Tokyo).....	T. Sugi	79	1,188	350	356
2nd (Sendai)....	G. Okano	71	820	6,379	267
3rd (Kyoto).....	G. Mori	57	994	260	299
4th (Kanazawa)..	T. Muto	42	824	247	258
5th (Kumamoto)	S. Mizobuchi	45	924	262	298
6th (Okayama)..	B. Komatsu	49	813	4,757	268
7th (Kagoshima).	T. Yui	70	677	205	218
8th (Nagoya)....	R. Komatsubara ...	45	838	249	264
Niigata.....	S. Hatta	35	461	837	151
Matsumoto.....	M. Mori	35	470	142	153
Yamaguchi.....	T. Shimbo	38	454	149	158
Matsuyama.....	M. Kaneko	40	475	153	154
Mito.....	T. Matsumura	57	586	177	191
Yamagata.....	M. Hayama	61	583	176	188
Saga.....	M. Ikoma	36	605	1,001	203
Hirosaki.....	S. Suzuki	40	570	171	110
Matsuye.....	Y. Kawai	40	591	178	196
Tokyo.....	M. Tsukahara	89	800	133	163
Osaka.....	S. Kumamoto	44	586	178	193
Urawa.....	K. Yoshioka	44	371	—	191
Fukuoka.....	O. Akiyoshi	47	586	174	191
Shizuoka.....	S. Hori	58	591	498	189
Kochi.....	Y. Nishikawa	40	570	516	183
Himeji.....	Y. Yamanouchi	41	588	171	186
Hiroshima.....	W. Totoki	38	604	170	187

Public High School

Toyama	K. Shibayama (act.)	68	641	58	173
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Private High Schools

Musashi (Tokyo).	K. Yamakawa	51	523	—	89
Konan (Kobe)....	T. Maruyama	47	467	151	90
Seikei (Tokyo)...	T. Asano	73	391	44	126
Seijo (Tokyo).....	K. Kohara (act.)...	65	469	—	159
Naniwa (Osaka)..	K. Miura	56	538	—	227

N.B.—The private universities as recognized by the new regulations have attached to them either a High School or a preparatory department which is exactly same as to course as a Government High School.

IV. UNIVERSITY EDUCATION

The New Regulations for Universities

Among the important innovations effected by the new regulations that came into force on April 1st, 1919, there is the formal recognition extended for the first time by Government to private "universities," those previously existing being anomalous institutions under control of the Special School Regulations. Especially notable is the fact that the new Regulation has placed the State and private Universities on the same status. A single college university will also be recognized in future, and each college of a University is to establish a post-graduate course. The establishment of Universities by prefectures is also provided for.

In return for the advantage conferred on the private University a certain sum has to be deposited by it with the Government, ¥100,000 for one college, while the faculty shall have professors of whom more than one half are to be exclusively attached to the institution.

The second important change is the abolition of the annual examination system, those who attend 3 or 4 years being granted the diploma if they pass the final graduation examination. Those graduates receive the degree of "gakushi" corresponding to M.A.

Since the above enactment 32 State, public and private institutions have been officially admitted to university rank and these added to the 6 Imperial universities make the number of regular universities 38 in total.

A. STATE UNIVERSITIES

Imperial Universities

There are six Imperial Universities, viz., at Tokyo, Kyoto, Sendai (Tohoku University), Fukuoka (Kyushu Univ.), Sapporo (Hokkaido Univ.), and Seoul (Keijo Univ.) as shown in the following tables. Graduates of Gov't High Schools are admitted on diploma in principle. To each University is attached the University Hall extending two years. The latest statistics are as follows:—

The Tokyo Imperial University

Est'd April 1877. Locat. Tokyo. Pres. Y. Kozai, D. Agr.

College	Dean	Faculty	Students	Graduates
Law.....	K. Nakada, D.L.....	598	1,942	544
Medicine.....	H. Hayashi, D.M.....		611	152
Engineering.....	Y. Tsukamoto, D. Eng...		952	236
Literature.....	U. Hattori, D. Litt.....		1,092	180
Science.....	S. Nakamura, D. Sc.....		349	92
Agriculture.....	U. Suzuki, D. Agr.....		868	222
Economics.....	S. Kawazu, D.L.....		868	211
Total (incl. those at the Univ. Hall)...			7,074	1,749

The Kyoto Imperial University

Est'd June 1897. Locat. Kyoto. Pres. T. Araki, D.M.

College	Dean	Faculty	Students	Graduate
Law.....	S. Sasaki, D.L.....	374	772	997
Medicine.....	K. Morishima, D.M.....		554	79
Engineering.....	T. Matsumura, D. Eng.....		574	157
Literature.....	K. Sakaguchi, D. Litt.....		574	70
Science.....	T. Wada, D. Sc.....		285	50
Agriculture.....	A. Kikuchi		833	255
Economics.....	M. Kambe, D.L.....		184	—
Total (incl. those at the Univ. Hall)..			4,135	782

The Tohoku Imperial University

Est'd June 1907. Locat. Sendai. Pres. J. Inouye, D.Sc.

Science.....	I. Kobayashi, D. Sc.....	219	{	313	48
Medicine.....	S. Yagi, D. Med.....			210	58
Engineering.....	H. Yagi, D. Eng.....			242	51
Law & Lit.....	U. Sato, D.L.....			401	—
Total (incl. those at the Univ. Hall)..				1,190	157

The Kyushu Imperial University

Est'd Dec. 1910. Locat. Fukuoka. Pres. G. Daikubara, D. Agr.

Medicine.....	S. Goto, D.M.....	} 195 {	497	1,629
Engineering.....	T. Suehiro, D. Eng.....		316	1,010
Agriculture.....	T. Katayama, D. Agr.....		244	84
Law & Lit.....	T. Minobe, D.C.L.....		799	—
Total (incl. those at the Univ. Hall)..			1,856	2,723

The Hokkaido Imperial University

In April 1918 the Agricultural Dept. of the Tohoku University was reorganized and made an independent University.

Locat. Sapporo. Pres. S. Sato, D. Agr.

Agriculture.....	K. Takaoka, D. Agr.....	254	{	320	1,489
Medicine.....	Y. Kon, D.M.....			278	133
Engineering.....	T. Yoshimachi, D. Eng..			281	—
Preparatory Dept., M. Aoba				884	2,372
Total				1,763	3,982

Attached to the University are special courses (departments) in agriculture, dendrology, civil engineering and marine products, with a combined staff of 136 and 439 students, graduates numbering 2,031.

The Keijo Imperial University

Est'd April 1926. Locat. Seoul. Pres. C. Matsūra.

Law and Lit.....	A. Hayami	60	163	—
Medicine.....	K. Shiga, D.M.....	40	143	—
Total		106	306	—

The Taihoku Imperial University

Est'd April 1928. Locat. Taihoku. Pres. T. Shidehara, D. Litt.

Lit. and Politics....	T. Fujita, D. Lit.....	16	25	—
Science and Agr.....	K. Oshima, D. Agr.....	16	40	—
Special dept. of Agr. & Dendrology.....	K. Oshima, D. Agr....	29	100	—

Average Age of Matriculation at Tokyo

Average age of new students matriculated recently in the Colleges of the Tokyo University is as follows:—

	1923-24 Y.m.	1924-25 Y.m.		1923-24 Y.m.	1924-25 Y.m.
Law	22.10	21.8	Science	23.2	23.2
Medicine	22.3	23.4	Agriculture	22.0	22.3
Engineering	21.4	22.8	Economics	22.4	23.1
Literature	21.9	22.8	Average	22.3	22.6

Profession of the University Graduates

The graduates of the Imperial Universities since the foundation to 1924-25 make the following record, as classified according to their condition in life, giving only those that are relatively numerous.

	Tokyo Univ.	Kyoto Univ.
Studying at Univ. Halls.....	314	285
Administration officials	2,036	367
Judges, etc.	1,194	371
Government technical officials.....	2,823	687
Medical officials	1,257	467
Professors and teachers.....	4,030	984
Barristers	972	240
Engineers in private concerns.....	2,422	1,095
Banks and companies.....	4,760	1,202
Practising medicine	1,069	355
Other business	2,430	353
Unemployed or unknown.....	2,366	1,331
Died	2,429	353
Total with others.....	28,114	8,070

The Tokyo University of Commerce

This is the first institution of university standing with a single college, and elevated from a Commercial School with the enforcement of the new regulations. It was established in 1875 and as the Tokyo Higher Commercial School it existed for more than twenty years until it was made a university in March 1920.

President, Z. Sano, D.L.

	Faculty	Students	Graduates
College of Commerce.....	68	900	254
Preparatory Department	87	640	210
Commercial Department	82	610	179
Teachers' Train'g Ins'te.....	—	90	31
Total (incl. those at Post-graduate course)	247	2,240	674

Universities of Medicine

These were formerly Government medical schools. The first two were made universities with a single college in April 1922, and the others in the following year.

Name	Location	Pres.	Faculty	Students	Grad
Okayama Univ. of Med.	Okayama	F. Tanaka, D.M...	21	245	152
Niigata " " "	Niigata	K. Sawada, D.M...	16	255	120
Chiba " " "	Chiba	K. Matsumoto, D.M.	18	243	212
Kanazawa " " "	Kanazawa	K. Sudo, D.M....	33	233	170
Nagasaki " " "	Nagasaki	I. Hayashi, D.M...	33	241	181

The last three combine each a pharmaceutical department.

B. PUBLIC UNIVERSITIES

There are four public or prefectural universities, i.e., the Osaka, the Aichi, the Kyoto, and the Kumamoto University of Medicine. The last two were admitted to university rank in May, 1922, up to which time they were prefectural medical schools. Besides, there is one municipal university of commerce at Osaka, former Osaka Higher Commercial School reorganized as university in Apr. '28. They all have a preparatory department of their own. Their staff, students, etc. are as follows:—

Name	Location	Pres.	Faculty	Students	Grad
Osaka Univ. of Med.	Osaka	C. Kusumoto, D.M.	54	735	175
Aichi " " "	Nagoya	S. Fujii, D.M.....	45	399	66
Kyoto " " "	Kyoto	C. Asayama, D.M..	38	298	83
Kumamoto " " "	Kumamoto	M. Yamazaki, D.M.	23	206	55
Osaka Univ. of Com.	Osaka	S. Kawada, L.L.D.	36	974	—

C. PRIVATE UNIVERSITIES

Since the enforcement of the University Regulations in 1919 as mentioned at the beginning of this chapter, altogether 17 private universities have been raised to the same official status as the Government institutions. They had formerly been placed under Special School Regulations as the other private institutions of collegiate standing are. Of the 16, four, i.e., the Ryukoku, Otani, Senshu, and Rikkyo Universities were officially recognized on May 25, 1922, and other four, i.e., the Toyokyokai, Ritsumeikan, and Kwansai Universities and the Jikeikai University of Medicine on June 6 the same year. The latest available figures are given below:—

Keio University

Est'd 1856. Locat. Tokyo. Pres. K. Hayashi, D.L.

College	Dean	Faculty	Students	Graduates
Economics.....	K. Kiga, D.L.....	30	1,786	481
Law.....	T. Itakura, D.L.....	35	739	142
Literature.....	T. Kawai, D. Litt.....	54	220	56
Medicine.....	T. Kitajima, D.M.....	73	406	92
Preparatory Dept	T. Kawai, D. Litt.....	96	3,939	944

The University has attached to it a middle and a business school.

Waseda University

Est'd 1882. Locat. Tokyo. Pres. S. Takata, D.L.

College	Dean	Faculty	Students	Graduates
Pol. Economy....	S. Shiozawa, D.L.....	35	802	228
Law.....	M. Terao	31	620	122
Literature.....	T. Igarashi, D. Litt....	73	677	122
Commerce.....	S. Hiranuma, D.L.....	26	999	242
Engineering.....	T. Yamamoto, D.E.....	105	723	165
Special Dept.....	B. Hattori, Ph. D.....	97	3,159	783
High.Norm.Dept.,	K. Nakagiri	51	1,026	158
High School (1st)	K. Nonomura	112	2,335	656
" " (2nd)	K. Utsunomiya	74	1,354	462
Collegiate Dept...	S. Sakamoto	88	719	137

There is also a technical school attached to the university with a faculty of 118 and an enrolment of 2,852, and a higher technical school with a faculty of 17 and an enrolment of 751.

Other Private Universities

	Location	Est.	College	Faculty	Students
Doshisha Univ.	Kyoto	1874	Law, Lit.	110	1,359
Hosei Univ.	Tokyo	1879	Econ., Law & Lit.,	54	3,231
Meiji Univ.	Tokyo	1881	Law, Com., Econ..	125	3,355
Chuo Univ.	Tokyo	1885	Law, Com., Econ...	98	542
Nihon Univ.	Tokyo	1889	Law, Lit., Com....	234	1,040
Kokugakuin Univ.	Tokyo	1890	Lit., High, Norm...	83	989
Jikeikai Univ. of	Tokyo	1881			
Med.			Med.	125	623
Rikkyo Univ.	Tokyo	1874	Lit., Com.	112	973
Ryukoku Univ.	Kyoto	1638	Lit.	86	814
Otani Univ.	Kyoto	1665	Lit.	101	765
Takushoku Univ.	Tokyo	1900	Com.	71	1,232
Kansai Univ.	Osaka	1886	Law, Com.	75	1,449
Ritsumeikan Univ.	Kyoto	1900	Law, Econ.	98	1,973
Senshu Univ.	Tokyo	1880	Econ., Law	85	2,151
Rissho Univ.	Tokyo	1904	Rel., Lit.	95	870
Tokyo Agr. Univ.	Tokyo	1925	Agriculture	127	1,100
Komazawa Univ.	Tokyo	1882	Rel., Lit.	82	895
Nihon Univ. of	Tokyo	1912			
Med.			Med.	88	865
Taisho Univ.	Tokyo	1907	Rel., Lit.	71	562
Koyasan Univ.	Wakayama	1886	Rel.	38	174
Toyo Univ.	Tokyo	1824	Ethics, Lit., etc...	22	199
Jochi Univ.	Tokyo	1913	Lit., Com.	31	200

D. ACADEMIC TITLES

Besides the titles conferred by both State and private universities on their graduates, there is a special title called Hakushi granted by them with the approval of the Minister of Education.

With the enactment of the new university regulations in 1919, the regulations regarding the conferment of the highest academic degree "hakushi" or "hakase," corresponding to Doctor (of Science, Civil Law, etc. as the case may be), has been revised and democratized. The privilege of conferring it is no longer reserved for the Imperial Universities and the Council of Hakushi; the Presidents of all the Government, public and private Universities are equally given the same privilege, subject to the approbation of the Education Minister. The title is of twelve kinds, as:—

Mar. 1927	Law	Medicine	Pharmacy	Engineering	Literature	Science	Agriculture	Dendrology	Veterinary	Commerce	Economics	Political Science
Living	186	2,416	45	399	153	227	162	41	22	4	10	1
Died	55	112	11	75	56	39	19	3	6	0	0	0
Total	241	2,528	56	474	209	266	181	44	28	4	10	1

Grand total: Living 3,628; Died 414.

V. TECHNICAL AND PROFESSIONAL EDUCATION

A. GOVERNMENT TECHNICAL AND SPECIAL SCHOOLS OF HIGHER GRADE

Under the direct control of the Department of Education there are 46 Technical and Special (professional) Schools of higher grade, which give instruction to those desiring to pursue some practical business or profession, such as industry, agriculture, commerce, medicine, etc. There are also schools for similar purposes maintained by prefectures or private persons which are given the same status as the above. (Vide VI.)

The development of this branch of education has been quite phenomenal recently. Graduates of Middle Schools (Girls' High Schools for females) are eligible, but as the applicants for the Government schools of this grade outnumber the available accommodation, they are taken partly on diploma and partly on examination.

The course extends three or four years, and some of the schools are provided with a post-graduate course. Of the Government schools only the Academy of Music admits girls also.

List of Government Technical Schools

(With latest available figures)

Higher Agricultural and Forestry Schools

Location	Director	Faculty	Students	Graduates
Morioka.....	Y. Kagami	45	365	117
Kagoshima.....	K. Yoshimura	33	380	102
Tottori.....	G. Yamada	29	215	61
Miye.....	T. Uyebara	36	325	100
Utsunomiya.....	Y. Sato	46	346	72
Gifu.....	E. Kusaba	30	264	—
Miyazaki.....	T. Miyahara	28	192	—

Higher Sericultural Schools

Uyeda.....	O. Harizuka	29	215	69
Tokyo.....	I. Honda	46	322	127
Kyoto.....	T. Yamada	32	243	116

Higher Commercial Schools

Location	Director	Faculty	Students	Graduates
Kobe.....	S. Tazaki	71	1,208	237
Nagasaki.....	S. Kimura	38	629	167
Yamaguchi.....	K. Washio	37	571	120
Otaru.....	F. Ban	40	527	141
Nagoya.....	R. Watanabe	39	658	209
Osaka.....	Y. Yamazaki	24	466	138
Fukushima.....	J. Ito	28	472	162
Hikone.....	K. Yano	34	438	131
Wakayama.....	I. Okamoto	34	481	138
Takamatsu.....	G. Sawada	37	461	—
Yokohama.....	T. Tajiri	34	433	—
Takaoka.....	T. Tadami	24	315	—

Higher Technical Schools

Tokyo.....	K. Nakamura	109	942	247
Tokyo (Shiba)...	R. Yasuda	57	369	96
Osaka.....	M. Tsutsumi	69	609	175
Kyoto.....	U. Murakami	32	281	58
Nagoya.....	H. Mori	48	447	142
Kumamoto.....	N. Miura	43	431	139
Yonezawa.....	N. Oba	43	330	72
Kiryu.....	H. Nishida	46	243	70
Yokohama.....	F. Suzuki	49	406	101
Hiroshima.....	T. Kawaguchi	42	360	92
Kanazawa.....	N. Aoto	35	390	92
Sendai.....	T. Shimbo	43	358	92
Kobe.....	S. Hirota	44	371	98
Hamamatsu.....	T. Kawaguchi	41	359	120
Tokushima.....	S. Komizo	38	326	77
Nagaoka.....	T. Fukuda	34	292	—
Fukuoka.....	S. Seki	29	290	—
Meiji (Fukuoka)...	C. Tomoda	55	354	81
Yamanashi.....	S. Matsuda	26	228	—

Mining School

Akita.....	M. Hiraoka	34	179	52
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Higher Mercantile Marine Schools

Kobe.....	B. Shimaya	61	779	193
Tokyo.....	S. Ozeki	47	316	64

List of Government Special Schools
Pharmaceutical Schools

Toyama.....	R. Takahashi	22	243	82
Kumamoto.....	Y. Murakami	27	274	94

Foreign Language Schools

Tokyo.....	J. Nagaya	85	1,032	248
Osaka.....	K. Nakame	63	955	269

Fine Art Academy

Tokyo.....	N. Masaki	74	812	109
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Academy of Music

Tokyo.....	K. Norisugi	65	704	85
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B. PUBLIC & PRIVATE TECHNICAL & BUSINESS SCHOOLS OF SECONDARY GRADE

These are divided into three grades, (A) the Middle School grade for 14-17 year boys, (B) the Higher elementary school standing for 12-15 boys and (C) the Continuation (or supplementary) grade for 12-13 or older boys and girls. They are granted a small aid from the State for 2 years at a time, the total sum disbursed on this account averaging ¥356,852 in five years according to recent statistics. The latest available data (March 1926) are shown below:—

No.	Technical	Agricultural	Fishery	Commercial	Nautical	Others	Total
A { Schools ...	82	170	11	196	12	57	528
Teachers ..	1,619	1,993	97	4,031	150	802	8,692
Pupils	22,835	33,986	1,203	94,517	2,371	16,580	171,492
Graduates..	4,587	9,953	264	13,100	657	5,695	34,254
B { Schools ...	28	155	1	38	1	46	269
Teachers...	344	1,016	8	279	9	306	1,962
Pupils	3,924	21,031	153	8,898	204	7,165	41,375
Graduates..	991	6,591	48	2,456	82	2,807	12,975
C { Schools ...	101	12,053	206	455	2	2,499	15,316
Teachers...	167	6,561	83	467	—	2,543	9,821
Pupils	9,315	784,421	11,506	36,305	332	209,558	1,051,437
Graduates..	4,632	236,436	3,822	12	44	75,571	335,319

VI. PUBLIC AND PRIVATE SCHOOLS OF HIGHER GRADE

Quite a large number of public and private institutions of collegiate standing exist. Many of them give technical or professional education, and there are some which style themselves 'Universities,' though they are not officially recognized as such but are placed under the Special School Regulations. They are anomalous, being in reality liberal education institutions.

Their course sometimes extends five or six years according to the length of the preparatory course which extends two or three years. As shown in the ensuing list there are several institutions for women.

Statistics of Public & Private Collegiate Institutions

(March 1927)

	No. Schools	Faculty	Students	Graduates
Public	5	156	1,465	490
Private	72	2,501	35,034	6,431
Total	77	2,657	36,499	6,921

Public Collegiate Institutions (1928)

Name	Location	Founded	Subjects taught	Faculty	Student
Chiba Horticultural Sch.	Chiba	1909	Hort're	20	150
Kyoto Sch. of Pict. Art	Kyoto	1909	Painting ...	31	300
Fukuoka Girls' Coll.	Fukuoka	1922	Lit., Dom. Science ..	44	324
Osaka Girls' Coll.	Osaka	1924	Lit., Dom. Science ..	70	380

Principal Private Collegiate Institutions (1928)

Name	Location	Founded	Subjects taught	Faculty	Students
Aoyama Gakuin, Div. Dept.	Tokyo	1879	Theology ..	23	96
Aoyama Gakuin, High. Course	Tokyo		Eng. Lang. & Lit.	63	977
Eaika Women's Coll.	Osaka	1922	Lit.	24	201
Bukkyo Semmon Gakko	Kyoto	1912	Buddhism ..	22	200
Butoku-kai Sch. of Martial Arts	Kyoto	1912	Fencing, Judo	26	124
Buzan Univ.	Tokyo	1912	Buddhism ..	33	90
Daito Bunka Gakuin	Tokyo	1923	Jap. & Chin. Classics ..	42	255
Doshisha Girls High Sch., High. Course	Kyoto	1912	Eng. Lit. & Dom. Sc'ce	60	746
Japan Women's Univ.	Tokyo	1901	Dom. Sc'ce, Jap. & Eng. Lit.	241	2,500
Joshi Elgakujuku	Tokyo	1900	Eng. Lang. & Lit.	37	394
Kwansai Gakuin	Hyogo	1889	Theology, Lit. & Com. ..	89	1,118
Kwanto Gakuin	Yokohama	1905	Eng. Lit. & Theol. ...	17	50
Kyoto Univ. of Shingon Sect	Kyoto	1898	Buddhism ..	27	49
Kyoto Women's Col.	Kyoto	1920	Dom. Sc'ce, Lit.	84	700
Kyushu Dental Col.	Fukuoka	1913	Dentistry ..	23	540

Name	Location	Founded	Subjects taught	Faculty	Student
Meiji Gakuin, Div. Dept. High. Course	Tokyo	1887	Theology ... Eng. Lt. ...	42	165 439
Nihon Dental Col.	Tokyo	1909	Dentistry ..	75	675
Okura High Com. Sch.	Tokyo	1900	Commerce ..	73	1,980
Osaka Dental Col.	Osaka	1917	Dentistry ..	53	640
Osaka Pharmac. Sch.	Osaka	1917	Pharmacy ..	35	400
Rinzai Sect Univ.	Kyoto	1886	Buddhism ..	32	102
Takachiho Higher Com. Sch.	Tokyo	1912	Com.	20	204
Teikoku Women's Col.	Tokyo	1910	Jap. Lit., Dom. Sc'ce	45	283
Tendai Sect Univ.	Tokyo	1897	Buddhism ..	16	59
Tohoku Gakuin	Sendai	1886	Lit., Theol..	40	335
Tokyo Dental Col.	Tokyo	1889	Dentistry ..	78	600
Tokyo Trinity Sch.	Tokyo	1885	Theology ..	18	35
Tokyo Women's Med. Col.	Tokyo	1900	Medicine ...	46	750
Tokyo Women's Univ.	Tokyo	1918	Dom. Sc'ce, Lit., etc..	66	430

N.B.—The above lists do not include those public and private institutions which have been given the same status as the Gov't Univ. since the enforcement of the new Univ. Regulations in April 1919. . .

VII. TRAINING SCHOOLS FOR TEACHERS

Each prefecture has one or more Normal Schools for preparing teachers for primary education, while there are four State Higher Normal Schools to train teachers for Middle, Normal, and Girls' High Schools. For this latter purpose some private universities and schools of collegiate grade maintain Higher Normal Departments.

A. PREFECTURAL NORMAL SCHOOLS

Each locality is under obligation to maintain at least one normal school, with an elementary school attached to it to give practical training to the students in the method of instruction. In April 1925 an important revision was effected in the regulations for normal schools with a view to turning out better and more efficient teachers. The regular course was lengthened from 4 to 5 years, while the preparatory course which formerly might be added according to the local circumstances was abolished. At the same time improvements were carried out in the subjects of study. Law and economics were newly introduced in the curriculum and English was made compulsory for male students.

The instructors, students and graduates classified as to sexes are as follows:—

	Schools for			Instructors		Students		Graduates	
	Male	Female	Mixed	Male	Female	Male	Female	Male	Female
1922-23 ..	49	37	9	1,620	243	19,735	9,631	5,508	3,235
1923-24 ..	52	39	7	1,705	255	22,791	11,033	6,971	4,328
1924-25 ..	53	40	6	1,767	237	24,558	11,831	8,903	5,113

B. HIGHER NORMAL SCHOOLS

The Higher Normal Schools are State institutions and consist of the Tokyo Higher Normal School and the Hiroshima Higher Normal School, and the Women's Higher Normal Schools in Tokyo and Nara. Schools of secondary and primary grades are attached to each of these schools to provide opportunities of practical teaching to the students. A kindergarten is also attached to each Higher Normal School for girls.

The existing Higher Normal Schools are generally divided into three courses, i.e. a principal, and a post-graduate course, besides a special course and an elective course. The principal course is divided into five sections, Japanese and Chinese literature, English language, geography and history, mathematics and physics, chemistry and natural history. The course of study in the main school extends over 3 years in the principal, and from one to two years in the post-graduate course.

The Women's Higher Normal Schools

The School in Tokyo comprises literature, science and art course, also a special course (mathematics, physics, chemistry, household management, Japanese language and gymnastics). The course of study extends four years in literature, science, and art, and two years in the special course.

The Nara School comprises Japanese and Chinese, history and geography, mathematics, physics and chemistry, and natural science.

Statistics of the Higher Normal Schools

		Instructors	Students	Graduates	Applicants	Admission
Tokyo.....	1922-23	116	903	172	1,103	296
	1923-24	124	951	202	1,162	270
	1924-25	123	958	219	2,157	257
Hiroshima.....	1922-23	60	599	106	582	212
	1923-24	70	679	159	1,191	214
	1924-25	67	706	165	1,904	210
Tokyo (Women's)	1922-23	66	440	107	709	128
	1923-24	65	440	107	867	117
	1924-25	68	430	115	964	116
Nara (Women's)	1922-23	38	337	68	395	106
	1923-24	36	367	82	555	108
	1924-25	35	380	76	738	105

C. SPECIAL INSTITUTE FOR TRAINING TEACHERS

The institute was specially organised for the purpose of training qualified teachers for normal schools, middle schools, and

girls' high schools and so to supplement the work of regular training institutions for teachers. It was first opened at the beginning of the year 1902-3, but has been rearranged and at present there remains only one institute for girls in charge of the Tokyo Women's Higher Normal School, which is provided with a course of housekeeping and sewing.

Besides the above the Tokyo University of Commerce, Agricultural College of Tokyo Imperial University and the Tokyo Higher Technical School have each an institute for training teachers of commercial, agricultural and technical schools of secondary grade.

VIII. SCHOOLS UNDER CONTROL OF OTHER DEPARTMENTS OF GOVERNMENT

There are several schools which are not governed by the Education Minister and these are described below. Besides, the Army, Navy, Government Railways and Communications Department have respectively institutions for training or instructing their officers and employees.

The Peers' School ("Gakushu-In")

Founded in 1877 as a private institution and maintained by the Peerage with a subsidy from the Imperial Household Department since 1884, the school consists of boys' and girls' department, each covering primary and secondary education grade, with a High School course for the former. The graduates of the course are admitted without examination to the Imperial Universities, in case there is accommodation available. Children of humbler classes are admitted to the school within a certain limit. In Mar. 1928 the Boys' Dept. had 889 boys and Girls' Dept. 757 attendants.

Fishery Institute

Founded in 1899 by the Department of Agriculture and Forestry, it gives instructions in the theory and practice of the aquatic products industry, and is divided into Regular Course (catching, manufacture & rearing), Pelagic Fishery, Post-graduate and Special Courses, the first two extending over three years. In Mar. 1928 the teaching staff comprised 77 and enrolment 326. Location; Etchujima, Tokyo. Pres. K. Okamura, Dr. Sc.

The Jingu Kogakkan

Founded in 1881 as an institution of higher grade for giving instruction in the Shinto classics, it is under control of the Ise Grand Shrine Office. Its course extends over four years and there is besides a special course of two years for training Shinto priests. In Mar. 1928 the instructors numbered 24 and the student roll 333 for regular and special courses. Location; Uji-Yamada, Miye Pref. Pres. M. Morita.

IX. SOCIETIES AND COUNCILS

The Imperial Academy of Japan

This institution corresponds to the Royal Society of Great Britain or the Académie Française. It was established in 1879 for the promotion of science and art, with the view to exercising a beneficial influence on culture in general, and its members are selected from amongst seniors of learning. In 1906 it joined the International Academic Union.

The officials of the Academy consist of one president, manager, and two sectional chiefs, (1) Literature and Social affairs and (2) Sciences. The full number of members was formerly 60, but it was increased to 100 in May 1925, to be appointed by H.M. the Emperor. Members above 60 years old may receive an annuity. An Imperial edict was announced in 1910 to grant ¥2,000 a year for 20 years, to encourage the work of the Academy. Barons Mitsui, Iwasaki and Sumitomo have each offered ¥1,000 a year for ten years respectively and the late Dr. Takamine and Baron Fujita, lump sums of ¥5,000 and ¥22,000 respectively. Several other funds have lately been added by private persons and corporations. In 1925 it has decided to publish proceedings in German, English and French besides those in the vernacular. President is J. Sakurai, Dr. Sc., and Director M. Anesaki, Dr. Lit. Membership 97.

Chemical and Physical Research Institute

This is a laboratory founded in Tokyo in 1917 at the instance of the late Dr. J. Takamine to promote the fundamental development of industries through scientific researches. Its fund amounting to ¥6,300,000 consists of Imperial donation, State grants and contributions by leading businessmen.

The chief officials are:—President, Prince Fushimi; Vice-President, Viscount E. Shibusawa; Superintendent, Viscount Dr. M. Okochi; 22 directors and 23 research staff.

At present more than 300 persons (including four ladies) are engaged in researches and practical application of their results. The subjects of researches now undertaken number 176, while 49 patents have been acquired from foreign and home governments, and some of them form new industries.

Scientific Research Council

This was created in June 1919 under the control of the Education Minister to unify researches in science and its application in foreign countries and Japan by keeping in connection with the International Scientific Research Council. It despatches representatives to the conferences of the International Research Council, answers inquiries and consultations of the State ministers concerned, and make suggestions about matters relating to science and its practical application.

It consists of the General Affairs Department and several research departments to which the members are attached according to their respective specialities. The members number less

than 100 to be appointed by the Government at the Council's recommendation.

The chief officials and the scientific departments are as follows:—

Chairman—J. Sakurai, Dr. Sc.

Vice-Chairman—A. Tanakadate, Dr. Eng.

Departments	Membership*	Director
Astronomy	12	S. Hirayama, Dr. Sc.
Geodesy	17	S. Nakamura, Dr. Sc.
Chemistry	16	T. Takamatsu, Dr. Eng.
Physics	14	H. Naguoka, Dr. Sc.
Geology & Geography...	10	N. Yamazaki, Dr. Sc.
Biology & Agriculture...	10	H. Ando, Dr. Agr.
Medicine	12	S. Sato, Dr. Med.
Engineering	22	Baron C. Shiba, Dr. Eng.
Mathematics	7	S. Takagi, Dr. Sc.

* The figures include those connected with two or more departments.

X. FINANCIAL MATTERS RELATING TO EDUCATION

The Educational Stock Fund

The sum of ¥10,000,000 set apart in 1899 out of the Chinese Indemnity is the origin of this fund, being chiefly intended to promote the cause of national education by granting loans to civil corporations to be used for educational purposes. The accounts are as follows:—

End of March	Loans	Bonds	Deposits	Total sum existing
1923	¥5,269,803	82,150	1,203,551	6,555,504
1924	5,245,217	93,400	1,236,353	6,574,970
1925	5,200,172	93,400	1,275,750	7,409,322

Note.—The bonds are calculated on purchase price, fractions being cut off.

Educational Expenses Paid out of Provincial and Communal Treasuries

	1922-23	1923-24	1924-25	1925-26
Elementary schools	¥217,547,768	¥232,942,528	¥242,596,583	¥250,691,373
Normal ..	12,121,637	12,295,159	12,876,937	15,440,010
Middle ..	28,735,302	24,901,692	25,338,321	25,297,910
Girls' High schools.	20,575,026	18,708,506	18,884,157	18,681,254
High schools	—	41,520	228,569	310,244
Universities	3,433,596	3,982,686	4,419,622	4,089,133
Special schools	523,105	533,572	566,202	212,260
Technical schools ..	32,966,857	31,126,424	34,587,563	35,848,083
Continuation schools	238,239	305,141	321,786	364,047
B.D.D. schools	213,288	311,384	343,546	452,443
Other schools	802,604	691,538	606,031	546,346
Kindergartens	922,043	1,049,639	1,154,532	1,163,106
Libraries	1,286,841	1,245,398	1,492,808	1,512,839
Others	29,730,566	27,170,063	29,816,773	34,088,567
Total	344,096,872	355,304,250	373,233,530	383,702,616

State Aids to Compulsory Education

The Treasury grants every year a sum of 40 million yen of which ¥4 millions is set apart for special local corporations, while one-third of the rest is distributed among poorer corporations and the remaining two-thirds, i.e. ¥24 millions among the other urban and rural corporations in proportion to the number of pupils and teachers. The rate of distribution for the last sum in the fiscal year 1925-26 was announced by the Education Minister as ¥65.18 per one teacher and ¥1.48 per one pupil.

XI. SCHOOL HYGIENE & COMPETITIVE EXAMINATION

Health of Male Students in Government Institutions

Health data of students in the Imperial Universities, High Schools and various Professional (collegiate) Schools are as follows:—

	No. of stud. nrs examined	Constitution percent			Eye-sight percent	
		A	B	C	Normal	Abnormal
1921-22 ..	26,396	41.23	36.28	22.49	53.72	46.28
1922-23 ..	29,962	41.83	36.08	22.09	53.28	46.72
1923-24 ..	34,008	42.82	37.04	20.14	49.18	45.43

Health of Female Students in Government Institutions

Health data of girls in Higher Normal Schools, in Girls' High Schools attached thereto, and in other professional schools are:—

	No. of girls examined	Constitution percent			Eye-sight percent	
		A	B	C	Normal	Abnormal
1921-23 ..	1,015	39.41	46.60	13.99	79.12	20.88
1922-23 ..	982	40.73	42.87	16.40	81.37	18.63
1923-24 ..	1,072	41.98	45.24	12.78	77.24	18.94

Health of Pupils in Public and Private Schools

Health returns of boys for the 1919-20 year stand thus:—

Schools	No. of pupils examined	Constitution percent			Eye-sight percent	
		A	B	C	Normal	Abnormal
Elementary	1,232,018	51.63	44.94	3.40	—	—
Middle	151,635	53.25	43.56	3.19	77.18	22.82
Normal	15,725	62.47	36.40	1.13	71.93	28.07
Technical	46,427	57.62	39.68	2.70	77.06	22.94
Special	2,492	44.06	54.94	1.00	60.71	39.29
Total or av...	1,448,297	52.09	44.58	3.33	76.58	23.43

The data for girls for the 1919-20 year are as follows:—

Schools	No. of pupils examined	Constitution percent			Eye-sight percent	
		A	B	C	Normal	Abnormal
Elementary	1,065,659	46.62	49.00	4.38	—	—
Girls' high	103,426	51.98	44.98	3.04	83.73	16.27
Normal	7,719	60.48	38.79	0.78	81.37	18.63
Special	206	53.40	46.60	—	73.79	26.21
Total or av...	1,770,010	47.18	48.58	4.24	83.55	16.45

The health data as regards height and weight of elementary school children for the 1922-23 year are given below:—

Age	Boys			Girls		
	No. examined	Height (shaku)	Weight (kan)	No. examined	Height (shaku)	Weight (kan)
7	141,180	3.54	4.704	135,179	3.49	4.533
10	139,817	4.01	6.244	129,799	3.96	6.001
13	51,414	4.42	8.056	84,528	4.45	8.193
16	471	4.81	10.231	165	4.68	10.539

N.B.—shaku=11.93 inches; kan=3.75 kg.

The data as to the average height, weight and girth of chest of the pupils of elementary schools throughout the country for 25 years between 1900 and 1924 inclusive are as follows:—

Age	Boys			Girls		
	Height	Weight	Chest	Height	Weight	Chest
7	107.0	17.6	54.2	105.5	16.9	52.4
8	111.5	19.3	56.1	110.1	18.5	54.2
9	116.4	21.1	57.9	114.9	20.3	55.8
10	120.9	23.1	60.3	119.4	22.2	57.6
11	124.9	25.1	61.8	124.2	24.6	59.7
12	129.4	27.4	63.9	129.1	27.3	61.8
13	134.2	30.2	65.5	136.8	31.1	64.8
14	140.0	34.1	68.2	140.3	35.4	67.9
15	147.3	39.5	71.8	145.2	39.8	71.2

N.B.—Height, chest—millimetres; weight—kilograms.

Competitive Entrance Examination

The steadily growing number of aspirants to schools of higher and university grade compels the authorities to erect the barrier of competitive examination, so that the rejected students, theoretically qualified to get admission on their diploma, have to shift themselves as best as circumstances admit. The admission ratio is very low in the 25 Government High Schools than that for institutions of similar or higher grade, as the following figures for the years 1924-25, 1925-26 and 1927-28 show:

Admission ratio of 25 Government High Schools

	Applicants to Lit. course	No. admitted	Applicants to Science etc.	No. admitted	percent of admission
1924-25	11,728	2,524	12,550	2,522	21.6
1925-26	25,012	2,538	16,057	2,574	20.7
1927-28	15,731	2,720	19,555	2,781	16%

The condition at the Government special schools is not much better, the record for 1926-27 admission being as follows:—

20 Technical and Mining schools	46%
10 Agr., Forestry and Sericulture schools	37%
12 Higher Commercial schools	48%

The congestion is much eased in the Government universities, the record for Tokyo, the mecca of Japanese students, reading thus for 1925-26:—

	Law	Economics	Medicine
Applicants	978	328	350
Admissions	650	258	180

XII. LIBRARIES AND MUSEUMS

A. LIBRARIES

The number of libraries in March, 1926, totalled 3,904 comprising one govt. (Imp. Library), 2,547 public and 1,357 private establishments. There are also libraries belonging to the Imperial and other Universities. Of the above the Imperial Library and the Library belonging to the Tokyo Imperial University surpass the rest as to accommodation and so forth. The libraries of Kyoto Imp. University, of the Cabinet and of the Imperial Household Department are also worthy of mention.

No. of	Mar. 1924		Mar. 1925		Mar. 1926	
	Gov't & pub.	Priv.	Gov't & pub.	Priv.	Gov't & pub.	Priv.
Libraries	2,192	1,377	3,251	1,260	2,547	1,357
Volumes (1,000) ..	3,885	2,409	5,389	2,424	4,581	2,610
Visitors (1,000) ...	17,530		23,174		21,058	

The Imperial Library

The Library in Uyeno Park, Tokyo, is the largest in Japan. Its recent statistics are as follows:—

End of March	No. of volumes			No. of days open during the year	No. of visitors	Aver. no. of visitors per day
	Jap. & Chin.	European	Total			
1925	298,684	88,315	386,999	322	374,069	1,161.7
1926	550,865	110,753	661,618	310	401,277	1,257.9
1927	563,252	112,633	675,885	328	401,942	1,225.4

The Imperial University Libraries

The number of volumes stored at the end of March, 1925, was as follows:—

	Jap. and Chin. books	European books	Total
Kyoto University	300,642	322,421	623,063
Tohoku University (Sendai)	103,479	88,801	192,280
Hokkaido University (Sapporo)	46,698	69,768	116,466

Reconstruction of the Tokyo Imperial University Library

The Tokyo Imp. University Library when fully restored will remain a lasting monument of the intellectual and cultural fraternity of the world. The Library with its 800,000 volumes, both Occidental and Oriental, was by far the biggest and the best in the Orient, and it was totally destroyed by the disastrous earthquake fire of Sept. 1, 1923. To effect its speedy restoration with the sympathetic cooperation of intellectual organizations, both at home and abroad, the University authorities sent in November of the year Mr. K. Takayanagi, Prof. of Law, to Europe and America. His mission was a complete success. In the United States he obtained, among other gifts, Mr. Rockefeller's donation of ¥4,000,000 unconditionally given, except that the sum is to be used for the construction of a model library

building. Similar hearty response came to his appeal in England, France, Italy, Belgium, Holland, Switzerland, Sweden, etc. Lord Balfour in England, M. Poincare in France, and Premier Mussolini in Italy actively assisted him for the success of his mission. The British Government appropriated £25,000 to help supplement the British book donation collected under the auspices of the British Academy. He brought home in March 1925 circa 300,000 books, collected either by purchase or as a gift. These foreign books, together with those got at home, will be housed in the big Library Building, with which Mr. Rockefeller's name will be forever associated, and will form the nucleus of this famous resort of learning in the Far East.

Public and Private Libraries

Public and private libraries present a far poorer show than the preceding two. In the provinces, the Osaka Library (Prefectural) possessing 194,000 books heads the list as to number. The Hibiya Library of the Tokyo Municipality added in 1921 2,000 new books published in U.S.A. and contributed to the city by the Carnegie Peace Commission. Among private libraries may be mentioned the Nanki Bunko founded by Marquis Tokugawa in 1921, the Ohashi Library founded in Tokyo in 1906 by Mr. Ohashi, the Nakanoshima Library in Osaka founded by the Sumitomo family, Shokado Bunko by the Iwasaki family, etc. Private universities, especially Waseda and Keio, have each a big one. Both Dr. Morrison's famous library acquired by Baron Iwasaki in 1917 for ¥350,000 and Mr. Kuhara's private library now in course of formation at an estimated cost of some ¥3,000,000 are also noteworthy. The former contains over 200,000 books on China and has been much enlarged and reorganized into a Seminary devoted to Oriental research, under the name of Toyo-Kenkyu-Sho, established in the grounds of Baron Iwasaki's residence, Tokyo.

B. MUSEUMS

The museums that exist in most important cities in the country are generally of limited scope and of commercial interest, as described elsewhere. The three museums that are under the control of the Imperial Household Department, in Tokyo, Kyoto and Nara, are more general in nature. The exhibits displayed are principally historical relics, specimens of arts and industry. Of these, the Tokyo Imperial Museum, the largest in Japan, was the first founded and dates from 1872. This museum has, among the articles exhibited, various costumes, utensils, &c., showing the customs and habits at different times and places, as also specimens of various natural productions. A zoological garden is attached to this museum. The Hyokel-Kwan, (erected in 1910 in commemoration of the wedding of the late Emperor and the Empress) makes a part of the Imp. Tokyo Museum, and is devoted to the display of objects of fine arts and art industry. The Tokyo Educational Museum formerly belonging to the Tokyo Higher Normal School has been opened to the public since 1914.

XIII. MORAL EDUCATION AND PHYSICAL CULTURE

A. MORAL EDUCATION

The Imperial Rescript on Education (1890) is regarded as the cornerstone of moral education in Japan. Even little children under ten have to learn by heart the text of the Rescript, though they can hardly be expected to understand it, as it is couched in the grave Chinese classic style. At the same time it is supplemented with text-books on ethics in which stories of famous men and women are predominating features.

Secondary Schools.—The Department of Education enforces the following general directions about it.

"The teaching of morals must be based on the precepts of the Imperial Rescript on Education; its object is to foster the growth of moral ideas and sentiments, and to give the culture and character necessary for men of middle or higher standing, and to encourage and promote the practice of virtues. The teaching should be carried out by explaining essential points of morals in connection with the daily life of pupils, by means of good works or maxims and examples of good deeds; and be followed by a little more systematic exposition of the duties to self, to society, and to the State; elements of ethics may also be given."

The Higher Institutions.—The Minister of Education issued in 1909 an Instruction with the object of having this neglected subject attended to regularly in schools of this grade, the text being as follows:—

"Education aims mainly at producing worthy men, and it requires no emphasizing that great importance should be always attached to the building up of character, whether it be at common or special schools. I am aware that for this reason the Government schools have never been slack in paying attention to the point. The students of those institutions are those who received a moral education while at the middle schools or lower stages; but they still lack firmness in their ethical ideas and are liable to fall victims to temptations of various kinds, while they are at a period of life when they are in need of moral culture. It is desirable that from now onward the Government schools devote more energy to the moral training of their students and foster and temper moral ideas in them, not only by giving lectures on ethics at stated intervals, but also by seizing every opportunity for the purpose, so that they may grow firm in their resolution to put in practice what they are taught. The principals, instructors and teachers of the schools are exhorted to make themselves with one mind and heart the centre of moral uplifting and personally influence their students and endeavor to the end that the Emperor's wishes contained in the Rescript on Education and also in the Imperial Message to the people (about thrift) may be carried out."

In the opinion of a competent foreign authority the present system of moral education in Japan is defective on account of the scarcity of hostels where students who are away from home may be placed under proper care, the compulsory and mechanical system of ethical education and absence of religious influence.

B. PHYSICAL CULTURE

"Judo" or "Jujutsu"

This manly art of self-defence which has become popular in both hemispheres owes its development to the reform effected by Mr. J. Kano who (see Who's Who) established for this purpose in 1886 a special training hall styled Kodokwan, now in Koishikawa, Tokyo. The reform consisted in eliminating the dangerous features from the various styles formerly in vogue and developing a new system suited both for the purpose of mental discipline and physical culture. By 1894 Mr. Kano's persevering efforts had begun to bear fruit, and branch halls were started in several provinces. The fame of the new style began to spread not only in Japan but even to foreign countries, especially after the Russo-Japanese War, and of Mr. Kano's pupils not a few went over to America and Europe to teach the art to foreigners. Several foreigners staying in Japan have been initiated in it. At present in almost all Japanese schools of secondary grade and above the exercise is practised as a method of physical culture. Private clubs and schools for the practice of "jujutsu" are to be found in all cities and towns. Some fifty thousands have been trained and in Mar. 1917 the graduates roll numbered over 20,000. The ancient custom, known as "cold practice" of going through the training before dawn during midwinter, presents a lively scene.

Fencing

In former days fencing and swordsmanship occupied the foremost place in the physical and mental training of the gentry classes. As practised today at schools, the art is merely a faint memory of the past greatness and importance. The practice sword is made of split bamboo, about four feet in length, with a hilt twelve inches in length for the double grasp. The points counted as effective hits are the head, both sides, the right hand and throat. The traditional method of the two-handed use of the sword is still preferred by the Japanese to the single grasp popular in Western countries. It is among policemen that the training is more actual and realistic than at schools, for these guardians of peace are required, from the nature of their duty, to practise fencing as a regular lesson and for actual purposes. The "cold practice" to encourage hardihood and endurance is also adopted in fencing as in "jujutsu."

Physical Culture for Girls

Physical culture is no easy business for girls attending the secondary grade schools, not merely because active exercises by girls are still regarded with disfavor by some conservative mothers, but chiefly because Japanese female garments, though attractive to look at, are not well adapted for active movement. Nevertheless, physical culture is steadily gaining ground, and in the girls' higher schools the subject of gymnastics, 3 hours a week, is included, and girls are made to go through training in fancy steps and figure movements, some calisthenics, and so on. In the Female Higher Normal Schools the Swedish system

and some other exercises are given. In the Japan Womens' University a hybrid system is in force, combining the halbert training which daughters of "samurai" had to acquire in former days with some forms of callisthenics.

Physical Education Research Institute

With the object of conducting scientific research into physical training at schools and training leaders in physical education, the Physical Education Research Institute was founded in December, 1924. It has eight research departments, with a suitable force of staff. The Departments are Anatomical, Physiological, Chemical, Hygienic, Pedagogics and Philosophy, Drill and Gymnastics, Athletic and Budo (judo and fencing).

Associations for Physical Culture

The most conspicuous among associations for physical culture is the Military Arts Association, organized in 1898 in Kyoto for the purpose of promoting military arts and developing the military spirit. Its roll reaches 2,167,376 members with Admiral R. Yashiro as president. The gymnastics practised in the association are "Jujutsu," fencing, archery and boating. Every year in May and August a tournament is held.

The National Physical Education Society, at Omori, Tokyo, was voted an annual subsidy of ¥30,000 by the Diet in 1893 for a period of five years. A large Imperial gift was also granted. Two gymnasia were established in Tokyo, one in Osaka and another in Hokkaido. The graduates are granted teaching certificates for all the common and higher schools of the country.

The Y.M.C.A. Gymnasium of Tokyo was destroyed in the quake-fire of September, '23, but the skeleton left being judged available it was decided to reconstruct it on the premises of the former structure practically in the same style as before, only slightly enlarged. A swimming-pool, bowling-alley, race-course (1-26 m.) and other sporting facilities are provided as before. The work of construction was started in the spring of 1926 and was finished in about 7 months.

Young Men's Training Institutes

With a view to training young men in general both physically and mentally to develop their citizenship regulations for the young men's training institutes were promulgated in April 1926, and the work was started in July. So popular is this undertaking that by the end of the month 15,130 institutes with the aggregate roll of 1,128,386 members came into existence throughout the land. Of the 12,064 autonomic corporations only 256 lacked this training organization. These institutes may also be established by private persons or bodies employing many young men, such as factories, mines and business houses. They train youths from 16 to 20 years of age free of charge, in the course of morals, civics, military drill and ordinary and technical subjects, for the period of four years. For those who finish the course with good record the regular conscription may be shortened. Each institute is

supervised by a director to be appointed from among elementary school masters, and the training is conducted by leaders comprising elementary school instructors, ex-service men and other persons judged competent for the work.

XIV. FOREIGN STUDENTS STUDYING IN JAPAN AND JAPANESE ABROAD

By "foreign students" are principally meant students coming to Japan from other countries for purposes of study. Of these the Chinese students are by far the most important both in number and other respects. It was some years after the close of the Japan-China war that they began to arrive in Japan to acquire modern learning. The first batch of the students arrived in 1900. After the Russo-Japanese war the number swelled at one time to 25,000 approximately. That was the high watermark, for soon a reaction set in and the departures began to exceed new arrivals. Several reasons account for this decline, such as the unfavorable impression which the action of students gave to the Peking (then Imperial) Government, on account of the radical ideas they carried home, and also the fact that there is no longer, as there was at first, a promising field of employment for adventurous Chinese lads with a mere smattering of "new learning" acquired in Japan. A large number of these students has occupied ministerial and other high posts.

At the end of March 1925 foreign students studying in Japan totalled 1,700 consisting of 1,378 male and 322 female. Of the total number 259 were attending universities and remaining 1,441 various schools of higher grade.

Japanese Students studying Abroad

The number of students of both sexes which Japan has sent to Europe and America since the opening of the country to foreign intercourse must reach enormous figures, especially when students who have gone abroad at their own expense are included. These foreign-going students are in most part selected nowadays from among those who have undertaken teaching at Government institutions for several years after they completed their academic courses. The allowance made differs according to the places of study and also subjects thereof. In general it is ¥4,320 for one in Europe or U.S.A. besides about ¥700 for "the outfit allowance." Up to March 1928, 2,474 were sent by the Education Department alone, of whom 342 were staying in various countries in July the same year. Other Govt. Departments have also their own students abroad.

XV. TEACHERS' & MEDICAL LICENSE EXAMINATION

Teachers' licenses examination and also the examination to grant licenses to those aspiring to become medical practitioners and pharmacutists are annually held.

License for High School Teachers

In view of the sudden expansion of the Govt. and other educational organs demanding reinforcement of the required complement of the staff, the license examination of the higher grade was first carried out in the spring of 1920. Of 35 applicants for English and Mathematics 6 only (all English) passed it with success.

The total number of the licenses given stood as follows:—

Year ended March	License exam.	License without exam.	Total
1924	4	311	315
1925	5	392	397

License for Secondary School Teachers

This service to supplement the staff of qualified teachers for secondary grade schools, normal schools, middle schools and higher girls' schools was started in 1895. The Examination Committee also takes charge of grant of license without examination to graduates of higher institutions both Government and private. Figures for the 4 years ending 1926 are as follows:—

Year ended March	License without exam.		License on exam.		Total
	Male	Female	Male	Female	
1923	1,446	749	799	179	3,173
1924	2,138	375	705	80	3,298
1925	2,585	614	677	113	3,989
1926	4,022		782		4,804

XVI. SUNDRY TOPICS

The Boy Scouts Organization in Japan

This movement is still primitive in Japan, as it practically dates from the visit of our Crown Prince (the present Emperor) to Europe in 1921, when he received Gen. Baden-Powell in audience and inspected Boy Scouts of England. It is true Mr. Griffin of Yokohama organized about 1913 the foreign Boy Scouts and similar associations existed in Hokkaido, Shizuoka, etc., but these were insignificant. The formation of the Association of Boy Scouts of Japan in 1921 at a grand meeting held in Shizuoka led to the general activity of this movement, and today upwards of 280 bodies exist throughout the country. On the occasion of the Prince of Wales' visit to Japan in 1922 all the different associations sent their representatives to Tokyo and for three days they conducted a Jamboree. The Association of Tokyo took active part on the occasion of the September disaster in the field education work for the benefit of child-sufferers. Though the Boy's organization in the modern sense is new, the spirit actuating it was pretty well represented by the juvenile bodies that formerly existed both among the masses and the two-sworded classes. For the latter the "Kenji-no-sha" (Association of Robust Boys)

that existed more than two centuries ago in the clan of the Lord of Satsuma (Princely House of Shimazu) is most noteworthy. The essential aim of this feudal organization was to inculcate in the minds of 'samurai' boys, seven to twenty-five years, the spirit of Bushido or Japanese chivalry. The young men's societies among plebeian classes, of the type that originated in the feudal period, numbered in 1921, according to the Department of Education, 1,557 with a total membership of over 200,000.

The Badge of the Boy Scouts is designed upon the three ancient sacred treasures of the Imperial House, i.e. Mirror, Sword, and Jewels. The Association is presided over by Visc. Shintei Goto, and its Board of Directors consists of Count Y. Futaba, Visc. M. Mishima, Messrs. M. Ozaki, M. Oseko, etc. It sent its representatives to the world's Jamboree held at Copenhagen in the summer of 1924.

American Scholarship for Japanese Girls

To execute the proposal of the International Committee of the A.A.U.W., the Association of University Women was composed of English and American college women residing in Japan and Japanese women who have studied abroad. Already an offer of scholarship was made by the University of Michigan and Vassar College, and in 1925 a graduate of the Japan Women's College in Tokyo was recommended to the latter after examination by the above-mentioned association.

CHAPTER XII

LABOR

LABOR ORGANIZATIONS

Trade Unions.—Japan has labor unions of one sort or another in plenty but trade unions as the term is understood in Europe and America cannot yet obtain official recognition simply because a Trade Union law is still absent in the Statute-book. The existence of trade unions as a working labor machinery, however, is forcing itself upon the attention of Japanese capitalists, only the latter taking American employers as their model, cannot yet bring themselves to tolerate the very idea of trade unions. According to Mr. K. Matsuoka, Manager of General Federation of Labor, most of the 35 serious disputes handled by the Federation during one year ending July 1927 originated from the animosity of employers or capitalists towards members of unions and from their summary dismissal or threat to dismiss those workers who were discovered to be members of unions. The trouble that occurred in Sept. 1927 at a certain silk filature in Nagano prefecture is typical. The proximate cause was the written request submitted by the union manager to the Directors that he be notified in case a worker belonging to the Union acted in any improper manner so that the worker be led back to the right path. The Directors took this as a height of presumption and as encroaching upon their sovereign right. So enraged were they that they summarily dismissed the entire 1300 members of the Union, the whole number of workpeople in the factory.

On the other hand there are not wanting some exceptions, the most notable being the Seamens Union and the Tokyo Cordage Co.'s workers trade union both of which exist with the tacit consent of the employers concerned, who also recognize the right of collective bargaining of the two bodies. It was owing to this understanding between employers and workpeople that the dispute arising in June 1928 at Kobe on account of the minimum wage demand preferred by the latter could be peacefully solved through mutual compromise. The Seamens Union is comparatively strong financially and is well organized so that it could make strong stand to its rival the Ship-owners League. Such sane understanding between masters and wage-earners is absent in almost all other trades, and indeed the two cannot yet emerge from the primitive stage of class antagonism, and while capitalists are bent on exploiting their workpeople the latter, still lacking discipline and imperfectly educated, retaliate the repressive treatment of their masters with direct action and destructive movements. Cooperative relation between the two classes for their common benefit cannot be hoped for to grow in such uncongenial atmosphere. One thing worth men-

tioning in this connection is the understanding reported to have been reached at between the Labor Delegates of Japan and India to the International Congress at Geneva in 1928 to formulate a Labor Congress of Asia, and there is good hope, Mr. Matsuoka writes, that this interesting idea will be materialized as soon as things settle down in China.

Union Statistics.—The following figures showing the number and membership of labor unions of all descriptions in Japan are based upon the investigation of the Social Welfare Bureau of the Home Office.

	June 1925	June 1926	June 1927
No. of unions.....	494	408	423
Membership	234,698	260,348	284,321

The Central Federation of Japanese Labor

When the Yual-kai was reformed as a Federation, its program was completely overhauled and a new one adopted, plainly tinged somewhat with radical thought. It replaced the harmonizing idea with the class-war principle. Mr. Suzuki still remains as honorary president, but the power of control is in charge of some executive committees elected from among the members. The autocratic method which Mr. Suzuki followed for several years has been given up by the Committees.

The resolution passed at the general meeting of the association in 1922 include the following items:—

- (1) Adoption of 8-hour day or 48-hour week (6-hour day or 36-hour day week in the case of mine workers).
- (2) Establishment of minimum wage scale.
- (3) Abolition of night work.
- (4) Abolition of the Public Safety and Order Police Regulations.
- (5) Recognition of the Soviet Government.
- (6) To make the Mayday a national holiday throughout the country.
- (7) Cooperation of the whole nation in economic activities.

The Federation publishes a monthly organ, "Rodo" (Labor).

At the annual meeting held in Kobe in May, 1925, a trouble arose between the supporters of the executive members of the Federation and the anti-executive elements which represented a left faction. It ended in the following month in a rupture and the Kwanto Local Council, the exponent of the "anti's", as well as 26 unions supporting it, seceded from the Federation to organize a new body styled the National Council of Trade Unions.

NUMBER OF LABORERS

The latest figures on laborers are not yet available, pending completion of the statistics of the census taken in Oct. 1925. To sum up, therefore, the results of investigations made by various government departments in recent years, the total number of laborers in the country amounts to 9,608,448, without considering the difference of the dates of inquiry for convenience sake.

Laborers	No.	Date	Investigated by
Factory	2,147,243	June 30, 1926	Social Bureau
Mine	289,201	"	"
Agricultural	3,117,582	Oct. 1, 1920	Agr. & Com. Dep't
Fishing	797,360	Oct. 1, 1924	Agr. & For. Dep't
Forest	310,323	Oct. 1, 1925	"
Commercial	1,109,000	Est. from Census on Oct. 1, 1920	
Traffic	774,719	1925	Rly & Com. Depts.
Casual	810,647	End 1922	Home Dep't
Salt fields	45,034	End 1925	Monopoly Bureau
Total	5,401,108		

DATA ON FACTORY LABOR

Factories and their Workers

At the end of 1909 there were 32,228 factories employing over 5 workmen. Taking the figure as 100, the index number decreased to 98 after five years, i.e. at the end of 1914. Then in 1919 it rose to 136, to increase in 1921 to 153, which proved the highest in recent years. For this remarkable growth of labor the rapid development of foreign trade and the prosperity of commerce and industry during the European War are responsible. The following shows the number of factories with over 5 workmen, and their operatives, as investigated by Com. & Ind. Dep't.:—

Year	No. of factories	No. of laborers		
		Male	Female	Total
1914	31,717	383,957	564,308	948,265
1922	46,427	834,314	856,705	1,691,019
1923	47,786	838,197	926,936	1,765,133
1924	48,394	859,783	929,835	1,789,618
1925	49,161	852,554	955,827	1,808,381
1926	51,906	893,834	981,361	1,875,195

Year	Index No.		Percentage of laborers	
	Factories	Laborers	Male	Female
1914	100	100	40.5	59.5
1922	146	178	49.3	50.7
1923	151	186	47.5	52.5
1924	153	188	42.4	51.9
1925	155	191	47.5	53.4
1926	164	232	47.6	52.3

As a general rule the number of female operatives always exceeds that of the male. But the recent statistics show a tendency of decrease in the former and increase in the latter. This may be attributed to the growing predominance in recent years of machine and tool manufacture and chemical industry, which have to depend chiefly on male workers. It is noteworthy in this connection that over 80 per cent. of factory girls in Japan are employed in spinning and weaving mills.

No. of Workers as Classified by the Kinds of Factories

(End of 1926)

Factories	No. of workers	Percentage
Textile	998,447	53.2
Mechanical	100,477	5.3
Machine and tool	236,051	12.6
Chemical	111,249	5.9
Food and drink	167,144	8.9
Miscellaneous	85,801	4.5
Total	1,875,195	100.0

No. of Factory Laborers as Classified by Age

At the end of 1926 the total number of factory laborers amounted to 1,943,657, of which 1,875,195 or 96% were regular operatives and the others were employees chiefly consisting of sundry men. Of the regular operatives those under 16 years numbered only 274,754 or 14.13% of the whole laborers. Male operatives 16 years old or above numbered 853,226 and female 747,215. Only 40,608 of those under 16 were male, while the females occupied as much as 234,146. This large number of girls under 16 is accounted for by the great number of females employed in filatures and cotton mills.

	Total (percent)	Regular operatives, percent)			Other employees, percent)
		16 & above	Under 16	Total	
Male	48.74	53.37	14.78	47.66	78.17
Female	51.26	46.68	85.22	52.33	21.82
Total ...	100.00	100.00	100.00	100.00	100.00
Male	100.00	90.06	4.28	94.31	5.54
Female	100.00	60.50	23.50	98.50	1.49
Total ...	100.00	82.39	14.13	96.47	3.52

Wages

According to the investigation made by the Bureau of Statistics, the average daily wages of factory workers stood at ¥1.75 in 1924 and ¥1.74 in 1925, to fall to ¥1.70 in 1926. Similar figures for male operatives were ¥1.97, ¥1.94, ¥2.34 respectively, while those for the female were ¥0.96 in 1924, ¥0.96 in 1925 and ¥0.96 in 1926. The average for male workers in 1926 was ¥1.48 over that for the female. Below is given the average movement of daily wages in 1926 as classified by factories:—

	Jan.	Mar.	May	Jul.	Sep.	Nov.	Av.	Av. for 1925	Av. for 1924
Total Average									
Factories	669	703	720	698	699	697	698	670	680
Male	¥2.10	2.18	2.19	2.45	2.42	2.49	2.34	1.94	1.97
Female	¥0.95	0.97	0.91	0.97	0.97	0.98	0.96	0.96	0.96
Weaving and dyeing factories									
Factories	213	216	218	215	216	215	215	212	213
Male	¥1.50	1.48	1.51	1.58	1.59	1.61	1.56	1.45	1.41
Female	¥0.95	0.92	0.91	0.95	0.95	0.95	0.94	0.93	0.92

Machine and tool works

Factories	96	114	119	115	114	112	112	148	150
Male	¥2.45	2.63	2.63	2.92	2.86	2.98	2.81	2.43	2.54
Female	¥1.08	1.11	1.11	1.45	1.39	1.45	1.29	1.17	1.09

Chemical works

Factories	163	172	176	168	170	168	169	137	139
Male	¥2.25	2.21	2.18	2.53	2.49	1.97	2.39	1.98	1.90
Female	¥1.03	1.04	1.03	1.21	1.17	1.19	1.13	0.88	0.82

Food and drink factories

Factories	77	78	79	78	78	81	79	78	80
Male	¥1.86	1.82	1.92	2.10	2.09	1.99	1.99	1.88	1.62
Female	¥0.95	0.88	0.89	0.94	0.96	0.94	0.98	0.88	0.89

Miscellaneous factories

Factories	113	116	121	115	114	119	114	83	87
Male	¥1.84	1.72	2.23	2.27	2.34	2.48	2.46	1.87	1.94
Female	¥0.80	0.82	0.82	0.90	0.87	1.62	1.00	0.80	0.91

Special works

Factories	7	7	7	7	7	7	7	7	7
Male	¥2.43	2.35	2.32	2.32	2.38	2.43	2.37	2.35	2.27
Female	¥1.26	1.22	1.19	1.25	1.25	1.23	1.24	1.17	1.10

Working Hours

According to the investigation carried out by the same authorities, the average working hours at factories were 10.26 during the second half of 1926. The longest average hours worked were 11.10 by weaving and paper milling factories. The shortest average 9.05 is recorded for machine and tool works.

Average working hours as classified by factories

Total average	10.26
Weaving, spinning, silk-reeling & cotton ginning	11.10
Machine & tool works	9.42
Metal working & metal refining	9.53
Chemical works	10.04
Pottery	10.09
Leather	9.35
Paper milling & paper work	11.10
Food & drink factories	10.34
Wood, bamboo and vine work	10.11
Printing & book-binding	9.45
Electricity & Gas works	10.15
Miscellaneous	9.15

Holidays

During the second half of 1924 the total average of holidays given to workers was 27.6 days. The average for special works was 28.1 days, followed by 28 days for food and drink factories, 27.4 days for chemical works and miscellaneous factories, 27 days for weaving and dyeing factories, and 26.7 days for machine and tool works.

Recess

In the same period the total average of recess per day stood at 1.3. As classified by factories the longest average was 1.24 for food and drink factories, followed by 1.7 for weaving and dyeing factories, 1.5 for special works, 1.4 for chemical works, 1 for miscellaneous factories and 0.46 for machine and tool works.

THE FACTORY LAW

The Factory Law, put in force on September 1st, 1916, was revised in March 1923 and carried into effect on July 1st, 1926. The main feature of the revision is the widened scope of application, and factories employing 10 workers are included as against the minimum limit of 15 in the old system, and also larger kinds of factories engaged in dangerous or unhealthy work.

Working hours.—The maximum working hours are fixed at 11 hours (formerly 12), but this is applicable only to factories employing the protected workers, i.e. male operatives under 16 years of age (formerly 15) and female operatives, there being no restriction as regards those employing adult males. The factories enforcing 11 hour day or less must allow their workers at least 2 off-days every month, and when a day's work exceeds 6 hours over half an hour's recess must be given, and when 10 hours over 1 hour's.

Night work.—The protected workers must not be employed in night work, from 10 p.m. to 5 a.m. (former—4 a.m.), but the factories such as filatures where work is divided into two shifts or more may be exempted from this provision till the end of June, 1929. In case these factories employ protected workers by dividing work into day and night shifts, the workers must be given at least 4 off-days a month, and the shifts must be changed in less than ten days.

Women in Maternity.—Women must not be employed 4 weeks before and 6 weeks after child-birth. But 4 weeks after child-birth they may be employed, when so desired by them, in work judged harmless by the physician. Women with children less than one year old must be allowed to suckle them twice a work-day, each time not exceeding half an hour.

Workmen's compensation.—Workmen injured by accident, falling ill or killed while attending to their duty are entitled to compensation by the employers as follows:—

1. Allowances for medical treatment till cured.
2. Allowances for temporary disablement:—not less than 60% wage-rate daily from the first day till cured, but not less than 40% from 181st day.
3. Allowances for permanent disablement:—
 - a. Invalidism for life.—not less than 540 times the daily wage-rate.
 - b. Disablement for life.—not less than 360 times the daily wage-rate.
 - c. Damaged working capacity, health permanently injured, or, in case of women, facial disfigurement.—180 times of the daily wage-rate.
 - d. Permanent though slight disablement without

damaging working capacity.—not less than 40 times the daily wage-rate.

4. Allowances for bereaved family.—not less than 360 times of the daily wage-rate of the deceased operative.
5. Funeral expenses.—20 times the daily wage-rate, but 20 yen when the sum amounts to less than 20 yen.

The investigation made by the Social Bureau, Home Department, puts the number of factories under the control of the old law at the end of 1924 at 27,073 with 1,493,811 workers, but the revision added 19,294 factories with 142,724 employees including 38,009 females and 2,800 males of protected age.

JAPAN IN THE INTERNATIONAL LABOR CONFERENCE

In the first International Labor Conference held at Washington in Oct., 1919, Japan was represented by two Gov. delegates; Messrs. Minoru Oka (formerly Dir. of the Industrial Bureau, Department of Agr. & Com.), and Eikichi Kamada (ex-President of the Keio Univ., Mem. of House of Peers), and for the capitalists by Mr. Sanji Muto (Pres. of Kanegafuchi Cotton Mill) with Uhei Masumoto, Chief-Eng. of Toba Dockyards, for employees. As female adviser Government choice fell on Mrs. K. Tanaka. The preliminary conference held in Tokyo which was attended by seventy-five representatives from the various provinces and from the principal trade unions presented exciting scenes, the union men severely criticising the method followed by the Government for selecting the labor representatives.

Japan also participated in the second conference held in June, 1920, at Genoa and in the third held at Geneva in Oct. '21. In the 4th session at Geneva Mr. Y. Tazawa, manager of the Kyocho-kai (the Harmonization Association), was sent as workers' del., whom the Japanese Federation of Labor refused to recognize as its representative. He criticized the attitude of the Japanese Govt. toward the draft treaty passed at the Washington Conference, saying that its essential parts still remained unadopted by it. His proposal that the post of a national correspondent of the I. L. B. be created in Japan was approved. At the 5th conference held at Geneva in Oct. 1923, a protest was made as to the qualification of the Japanese labor delegate, Mr. R. Uno, of the Osaka Technical Education Association. In view of repeated troubles in connection with the selection of the labor delegates and their advisers the Government adopted a new method of electing them for the 6th International session in 1924. Representative labor unions with a membership of over 1,000 were entitled to cast one vote per every 1,000 of their members. Then the Government made appointment from the candidates elected, after taking into consideration the nature of the subjects of discussion at the session.

By this method Mr. B. Suzuki, Chairman of the General Federation of Japanese Labor, was elected labor representative to the 6th, 7th and 10th international conferences, while at the 8th and 9th conferences Mr. I. Narazaki of the Japan Seamen's Union, represented labor interest as the agenda of the sessions mostly related to maritime affairs.

Among the treaties and advices adopted at the past conferences the following are now enforced or enacted in Japan:—(1st Conf.) part of the treaty relating to unemployment; treaty relating to minimum age of child labor in manufacturing industries; advice on the prohibition of the use of yellow phosphorus; advice on the protection of women and children from lead poisoning; (2nd Conf.) treaty relating to minimum age of child labor on the sea; treaty relating to seamen's labor exchange.

In August 1927 Japan ratified the treaty relating to minimum age of child labor in manufacturing industries which was adopted at the 1st international labor conference. The treaty which prohibits the use of children under 14 years recognizes an exception for Japan concerning the use of children of over 12 years who finished the course of elementary schools and children of age between 12 and 14 years at present engaged in manufacturing industries.

LIVING EXPENSE OF WORKPEOPLE

(Based on the Gov. Statistical Bureau's researches carried out during the one year ending Aug. 31, 1927)

The data obtained by the Bureau on the living expense of salaried men and laborers are based on the household book-keeping for the month of September 1927. The researches for both are subdivided into nine grades between the minimum "¥60 or under" and the maximum "¥200 or over" per month.

INCOME

Salaried men.—The researches were carried out on the household economy of 1,708 families composed of 6,960 members, the average figures of their household economy being tabulated below:—

Total income	Earned income		Unearned income	Actual outgoes	Earned income to actual outgoes	Actual income to actual outgoes
	By head	By members				
¥114.31	92.25	9.61	16.45	114.13	—16.27	+0.18

The balance sheet presents entirely different aspect according to the standing of the family as to income. Thus for a family with an income under ¥140 per month the balance is always adverse whether the income is actual or earned. It is only in the book-keeping of a family with ¥160 or thereabout a month that the actual receipt produces more or less balance, this surplus amounting to ¥56.13 when the income is 200 or over. Even in those families of higher standing the earned income as balanced against actual outgoes is always short.

Laborers.—Similar data on laborers' domestic economy comprise 3,406 families with 14,253 souls. The average position of their livelihood is tabulated as in the case of salaried people.

Total	Earned income		Unearned income	Actual outgoes	Earned income to actual outgoes	Actual income to actual outgoes
	By head	By members				
¥94.31	78.47	7.77	8.07	84.10	+2.14	+10.21

Of the actual income amounting on the average to ¥94.24 the earned income, ¥86.24, occupies 91% and the unearned income, ¥8.07, only 9%, this proportion between the two items comparing to 86 and 14% respectively in the case of salaried men's economy. Then the family members' earnings of laborers is in higher ratio than in the economy of the salaried men's families. When the family members' earnings are analyzed and the wife's and children's share is set apart, it is found that while in the case of the average salaried men's economy the wife's earning is much higher than that of the children the relation is reversed in the laborers' family.

OUTGOES

The outgoes are broadly analyzed for both salaried men and laborers under three heads, i.e. 1. living expense, 2. social expense, 3. culture expense. The first item consists of food, dwelling, clothing and other necessities for existence; under the second group are included medical, school, communication expenses and taxes, while the balance remaining constitutes the culture outlay. Thus analyzed the outgoes in the domestic economy of the two classes of workpeople, salaried men and laborers, may be tabulated as follows:—

	Average out goes	Living	Social	Cultural
Salaried men	¥114.13	79.94(70%)	16.68(15%)	17.51(15%)
Laborers	84.10	63.50(74%)	10.40(13%)	11.20(13%)

Items forming the bare necessities of life are shown below in their relative weight to the general economy:—

	Food	Dwelling	Clothing	Lighting & heating	Others
Salaried men (%)	35.9	19.2	10.9	4.0	30.0
Laborers (%)	43.5	16.4	10.3	4.1	25.7
Average (%)	40.4	17.6	10.4	4.1	27.4

UNEMPLOYMENT

The only available unemployment statistics are those compiled by the Government Statistical Bureau in Oct. 1925 at twenty-six urban and adjoining districts throughout the country. According to the census returns the districts held 2,564,093 families consisting of 11,628,817 inhabitants, and of these the unemployment inquiries covered only 1,418,872 families with 2,355,015 people, corresponding to 55% and 20% of the respective total numbers. The results of inquiries are tabulated below:—

Unemployment inquiries

	Total No. of people	Salaried people	Workpeople	Day laborers
Total No.	2,355,015	615,331	1,533,433	206,251
Male	1,870,300	560,703	1,111,609	197,988
Female	484,715	54,628	421,824	8,263
Unemployed	105,612	19,396	46,278	39,938
Male	99,061	18,410	42,420	38,231

Female	6,551	986	3,858	1,707
Employed	2,249,403	595,935	1,487,155	166,313
Male	1,771,239	542,293	1,069,189	159,757
Female	478,164	53,642	417,966	6,556

Unemployment percentage of the three groups

	Total No.	No. unemployed	Unemployment (percent)
Salaried people	615,330	19,396	3.15
Workpeople	1,533,416	46,267	3.02
Day laborers	206,251	39,938	19.36

Causes of Unemployment

Those actually unemployed at the time of inquiry and those employed on that occasion but were out of work at one time or other during the preceding year altogether make 240,041. Analysing the number as to cause of unemployment the following figures were obtained, giving only principal items:—

From private consideration.....	26%
From curtailment of business.....	18%
From lack of work.....	12%
From illness	11%
From weather condition.....	11%

HOUSING OF LABORERS

The inquiry carried out by the Labor-Capital Harmony Society on the housing condition of laborers from 1922 to '24 assumes that as the majority of laborers' income per month averages ¥50 to 100, the general average of income of laborers for the whole country may be put at ¥73.92 to 79.06. The following housing data are based on that assumption.

	No. of families reported	No. of members	Income (Yen)	Average per family			Deposit (Yen)	Fixture (Yen)	No. of mats
				No. of rooms	No. of mats	Rent (Yen)			
1922 ..	951	4.3	73.92	2.6	11.1	10.20	14.05	15.18	2.6
1923 ..	889	4.3	79.06	2.6	11.3	12.23	24.55	18.57	2.6
1924 ..	693	4.5	74.53	2.6	11.5	11.94	15.66	24.58	2.6

Further particulars are picked out as follows from the report of the same inquiry:—

	Rent	Rent per mat	Deposit	Rent to income	Space per capita
Max. Tokyo	11.01-16.24	Tokyo 1.95-1.59	Tokyo 24.18-39.4	Tokyo 13-21%	Tohoku 2.3-3.9 mats
Min. Tohoku	4.67-8.61	Tohoku .30-0	Chugoku 1.3-2.3	Nagoya 8-10%	Kyushu 2.1-2.6 mats

N.B.—"Tohoku" designates northeastern region and "Chugoku" middle section of the main island. A mat is a kind of rush carpet and in Japanese architecture is a unit of space measuring 3 × 6 ft.

RECENT LABOR DISPUTES

The most memorable labor dispute that occurred recently is that of the Noda Soy Factory run by the Mogi family. Beginning

on Sept. 16, 1927 it lasted till April 20, or 218 days, the strikers involved numbering about 1,100 corresponding to 240,000 days work. The trouble cost the workers about ¥250,000 and employers ¥3,000,000. The masters and workers had never been friendly, for since 1923 the employers incensed at what they considered the unruly conduct of the workers had been secretly planning to crush the Noda Trade Union. This design was eventually effected, though they had to disburse ¥380,000 as dismissal grant, aids to the living expense, etc. The fact was the trouble having developed into one of national importance the Prefectural authorities of Chiba and the Kyocho-kai (Labor-Capital Harmony Society) were obliged from consideration of public order and welfare to step in as arbitrators, and the employers thought it inadvisable to persist in their original resolution to fight to the bitter end. Thus the dispute ended in the virtual victory of the masters and in the elimination of to them, objectionable elements.

The Seamens Minimum Wage Dispute.—This trouble that arose between seamen and shipowners of non-subsidized vessels run in coasting service was preceded by a ca'canny movement of the seamen extending some weeks but the open warfare lasted only five days. The ships laid up numbered some 300 with the total tonnage of roughly 1,500,000 tons. The two opposing bodies being compact bodies they could settle the trouble by submitting it to the decision of the arbitration committee on which both capital and labor were represented. The loss experienced by the shipowners is estimated not to have exceeded ¥600,000. The minimum wage scale agreed to is as follows:—

Tonnage	A class hands	B class hands	C class hands
3,000 or over tons.....	¥75	¥57	¥40
1,500—3,000	¥70	¥55	¥38
500—1,500	¥65	¥50	¥35

For apprentices of six months standing, ¥15; 7-12 months, ¥30; 13-18 months, ¥35; to be enrolled as ordinary hands after 18 months service. By clever manœuvre the Seamen's Union has won in this dispute, but it is believed that the Shipowners are secretly contriving a retaliative measure which may be sprung upon the workers at any favorable opportunity.

Data for Strikes

	Cases	Participants	Participants per cases	Strikes counted by number of days
1923	263	35,126	133.5	—
1924	333	54,526	163.7	2,921
1925	293	40,742	139.0	2,270
1926	495	67,234	144.4	7,037

**Average Number of Strikers Per Case Classified
by Occupations**

(1925-1926)

	Cases	Strikers	Average per case
Mining	35	8,534	243
Spin. and weaving.....	56	13,333	239
Dyeing	167	12,435	75
Mech. and metal workers..	131	18,033	138
Ship-building	13	3,464	267
Chemical industry	102	7,645	75
Salt-fields	3	3,509	1,169
Total incl. others.....	788	107,985	137

Strikes Classified by Causes

	1924		1925		1926	
	Cases	Participants	Cases	Participants	Cases	Participants
For higher wage.....	134	23,637	100	7,903	226	14,610
Against its decrease..	30	3,227	41	6,245	47	4,643
For better treatment	100	21,818	83	12,855	133	32,578
Against foreman	16	1,431	16	1,471	30	2,978
Others	45	4,413	53	12,268	59	12,425
Total	333	54,526	293	40,742	495	67,234

Strikes Classified by Result

		Compromise effected	Demand accepted	Demand withdrawn	Demand refused	Total
1923 {	Cases	120	38	—	110	270
	Participants	14,379	6,908	—	14,937	36,259
1924 {	Cases	135	66	—	132	233
	Participants	19,707	11,608	—	23,211	54,526
1925 {	Cases	114	52	—	127	293
	Participants	10,744	11,922	—	18,076	40,742
1926 {	Cases	161	139	2	193	495
	Participants	14,412	11,999	38	40,785	67,234

Strikers Arrested

	Sedition		Under Art. 17 Pub. Saf. & Ord. Police R. g.		Under other laws		Total	
	Cases	No.	Cases	No.	Cases	No.	Cases	No.
1923	4	148	6	21	19	68	29	237
1924	7	143	13	80	37	160	57	383
1925* ...	3	87	1	6	25	86	29	197

N.B.—* Figures by the end of October.

CHAPTER XIII

SOCIAL PROBLEMS AND FACTS

THE SITUATION

So far as the socialist movement is concerned, the two years of 1923 and 1924 were the most eventful in Japan. In June 1923 a communists' plot was revealed and many of them were arrested, while in September the same year the earthquake disaster gave rise to a reactionary movement which was accelerated by the rumor of Korean attacks. Then in December the so-called Tora-no-mon "lese majeste" affair caused a great shock to the whole nation. As a result the authorities began to exercise stricter control over secret societies and movements, until at last the Peace Preservation Law was enacted in the 50th session of the Diet. That the attitude of the authorities towards the "dangerous" thoughts is growing in severity may be inferred from the fact that in 1925 the Education Minister ordered the dissolution of the societies of university students for the study of social science, on the ground that they were liable to lead to practical movement. Some of the students were arrested on the charge of lese majeste. The latest development is given in the paragraphs headed "The Communist Affair in Japan" inserted elsewhere.

DELIBERATIVE ORGANS

With the sudden development of social, especially labor, movements after the European War, various organs have been established to conduct researches and investigations into the subject. The principal ones now existing are as follows:—

The Kyocho-kai (Tokyo).—Organized in 1919 by Government authorities, university professors, business men, social workers, under the principle of the "harmonization of capital and labor." Carries on investigation of social problems and issues a monthly.

Ohara Social Research Institute (Osaka).—Established by Mr. Ohara, a millionaire in Okayama. Is one of the most important research organs for social problems in the country, with Dr. Takano as the chief and a number of able experts on the staff.

Kurashiki Institute for the Research of the Science of Labor (Kurashiki, Okayama Pref.)—Also founded by Mr. Ohara. Investigates the scientific aspects of the labor problem.

Industrial Labor Investigation Office (Tokyo).—Established in 1924, chiefly by representatives of labor organizations and scholars, to investigate political, economical and social affairs of the country, for the purpose of furnishing rational and fundamental data for the labor movement.

Arima's Agrarian Research Institute (Tokyo).—Established by Mr. R. Arima (now Count) who has the most advanced and democratic ideas. Is devoted to the study of agrarian problems, which are now growing in importance and attracting the serious attention of the public.

SOCIAL BUREAU AND NEW LAWS

To keep pace with the advance of the times the Government created the Social Affairs Bureau under the control of the Home Office for the administration of labor and social works. In 1922 the Seamen's Labor Exchange Law and the Health Insurance Law were enacted. In the following year the Diet passed the Bill for the Minimum Age of Industrial Laborers and the Revision of the Factory Law.

In 1925 the regulations controlling the enlistment of laborers were enforced, while the following year marked a memorable period in the history of labor legislation in the country, for the 1st of July, 1926, saw the enactment of the Health Insurance Law, the enforcement of Labor Dispute Conciliation Law, and regulations providing for the minimum age of industrial laborers; the revision of the Factory Law and Regulations for Miners' Compensation; and the abolition of the long-disputed Art. 17 of the Public Safety and Order Police Regulations penalizing the instigation of strikes.

TENANCY DISPUTES

The tenancy disputes have become so wide and so serious that in not a few cases they even invited police intervention. According to the Home Office, the number grew from 408 in 1920 to 2,206 in 1925, though declining to 2,208 in 1926, and of the figure for 1925 1,380 came from floods and other natural disasters, 255 from the proposed increase of farm-rent, etc. In the number and nature of disputes, Osaka Prefecture headed the list, followed by Hyogo, Fukuoka, Aichi, Kagawa, Okayama, Gifu and Niigata Prefectures. As the number of disputes increased, tenants' unions also grew in number, increasing to 3,926 at the end of 1926 from only 241 in 1918. Many of them combine themselves into federations, of which the most notable are the Japan Farmers' Union, All-Japan Federation of Farmers' Unions, Central Japan Association of Farmers' Unions, etc. As an expedient to minimize tenancy troubles harmony associations have been organized recently by landed farmers and tenant farmers in various prefectures, the number of such organizations reaching 1,491 at the end of 1926 with membership of 164,585. (Vide Supplement, 1927 Edition)

The Tenantry Arbitration Law came into force on December 1st, 1924. The number of cases brought before the arbitrators was 222 in 1925 and 1926 and 1,158 in 1927 (Jan.-Oct.), out of which 96 and 508 respectively were successfully settled while 66 and 247 were withdrawn.

CO-OPERATIVE SOCIETIES

The co-operative societies in Japan were established under the Co-operative Societies Law enacted in 1909, the object being to supply to middle class producers, agricultural, industrial, etc. funds at a low rate of interest and without mortgage. The societies are juridical persons and are classed as Credit Societies, Sales Societies, Purchase Societies and Productive Societies. These different lines may be combined in one society, so that there are altogether eleven other kinds consisting of two to four different lines. In order to make a society easily accessible to people, it is provided that one subscription should not exceed ¥50, while to prevent aggrandizement one member is not allowed to own more than ten such shares. Special privileges are afforded to co-operate societies by the Government, as exemption of taxes on income and business, reduction of registration taxes, while the hypothec banks are permitted to advance funds without security and redeemable in five year instalments. At the end of 1925 there existed 14,260 societies with a total membership of over 3,000,000.

Mention must be made here of the "shohi-kumiai" (consumers' co-operative societies). These do not form an independent class in the Co-operative Societies Law, but come under the purchase society. They numbered about 247 out of the 379 independent purchase societies as existing on Mar. 31, '25. There is an essential distinction between the consumers' co-operative societies and the other classes of co-operative societies. The one is merely a society for consumption, while the others are capitalistic organizations aiming at profit. At the time of the enactment of the Law there already existed a consumers' society organized by subordinate government officials, called the Kyodosha. Since then this special kind of co-operative society made but insignificant progress, but in 1918 and the following few years, when the sudden advance of the prices of commodities menaced the living of propertiless classes, considerable stimulus has been imparted to its development.

The investigation effected by the Ohara Social Research Institute puts the number of the societies at the end of 1925 at 212. The membership and percentage of the organizations as classified by their nature were as follows:—

Kinds	Membership	Percentage
Public clerks	22,476	19.92
Other salaried men	9,101	8.07
Company employees	44,729	39.64
Laborers	1,220	1.08
Others	35,297	31.29
Total	112,823	100.00

MUTUAL AID ASSOCIATIONS OF WORKMEN

In almost all Government or private establishments of a large scope the mutual aid system of workmen or their families is in force. The following shows the summarised figures for 1925 for all associations, Police, Monopoly Bureau, Mint & Government Railways (for 1924), Forestry Bureau. (1923):—

Total Membership	519,653
Receipts	
Fees	¥13,361,450
Government Grants	10,635,602
Others	9,276,546
Total	33,273,598
Allowances	
Death	2,191,447
Wounded and sick	1,303,193
Continued service	1,112,196
Retirement	4,864,145
Medical treatment	1,421,184
Others	1,201,363
Total	12,093,528
Total No. of recipients	245,440

HEALTH INSURANCE

The Health Insurance Law which was enforced partially from July 1925 and in full from January '27 is an epoch-making labor legislation in Japan. The insured are of two classes, 1. Compulsory, consisting of workers under the protection of the Factory Law or the Mining Law, excepting those drawing ¥1,200 or over a year; 2. Voluntary, comprising those for whom the employers have, with the consent of majority of the workers, obtained the recognition of the Home Minister as insured to come under the law. The insurers consist of the Government and the Unions organized as juridical persons by employers and workers concerned. The funds are made up of the State subsidies and the premiums, while the expenses are borne by the insured, employers and State. The State's share is 1/10 of the total from Government and Insurance Unions and is within the limit of ¥2 per insured. In principle the premiums are equally borne by the insured and employers, the maximum share of the insured to be 3/100 of the standard daily wages. For the insured under the direct Government control the daily rate of premiums varies between 3 and 10 Sen per 1 Yen standard wages. The benefits allowed for sickness and injuries are within the maximum limit of 180 days. The burial or maternity benefits are in general ¥20. The latest figures showing the operation of the law are given below:—

Number of Insured

	Government	Unions	Total
Compulsory	1,138,706	761,124	1,899,830
Voluntary	1,449	26,199	27,648

Number of Unions classified by Premium Rate

On Sept. 1, '27 there were 326 Insurance Unions classified according to the rate per 1 Yen daily wage, this rate being graded into ten ranging from the lowest of 3 Sen or less to the highest of 10 Sen or over.

The factories charging 3-4 Sen numbered 170, those of 4-5 Sen 41, and those 3 Sen or less 40, the factories charging other

rate being much smaller. Then as to nature of factories organizing insurance unions, textiles head the list with 122, followed by machinery and tools with 56 and chemicals 38.

The 1927-'28 estimate of premium receipt and benefits payable is as below:—

	Government	Percent	Unions	Percent
Premiums	¥29,439,016	91.0%	¥18,312,551	91.0%
State subsidies	2,803,738	8.7%	1,385,599	6.0%
Disbursements:				
Benefits payable ..	¥28,037,385		¥17,304,471	
Equipments, etc. ..	300,000		—	

Panel doctors in the Government health insurance service in April 1927 numbered as follows:—Doctors, 34,236; Dentists, 10,353; Pharmacutists, 6,516.

WOMEN PROBLEMS

Women in Politics

The 45th session of the Imperial Diet (1921-2) witnessed the repeal of Clause 2 of Article V of the Public Peace and Order Police Regulations prohibiting women from promoting or attending political meetings, this making a step towards the political emancipation of the Japanese women. The inclusion of law in the curriculum of some girls' schools—The Joshi Daigaku or Women's University (Vide Chap. Education), for instance,—the departure made by some private universities in Tokyo and elsewhere which have thrown open the lectures on law, political economy, sociology and other social or political science to the attendance of girl students and women—the Meiji University and the Nippon University, for instance,—are all proofs attesting the gradual awakening of Japanese women.

Women are still denied right to vote for any public assembly, the only semblance to it being the decision of the Railway authorities to allow from 1923 to women workers voting right in electing the workers' representatives to the Workers Council created in 1920 as advisory organs on matters affecting the interest of railway workers.

The spirit of awakening is in the air and women's activity even in politics is a thing to be treated now seriously. Before the enforcement of the revised Election Law for the first time on the occasion of the Manhood Suffrage election early in 1928 women's endeavor in Parliamentary and indeed other elections were practically confined to house-to-house solicitation of wives and near relatives of the candidates, but that practice, nuisance it was generally considered, having been forbidden women's part in election contests has become specialized, if narrowed in scope. In the last Parliamentary election women speakers were even in greater demand than the male, owing to scarcity of supply, and it is reported that these women orators altogether made some 276 speeches. What is interesting to note is that the fair speakers were mostly in support of those candidates who had declared themselves in favor of granting franchise to women, and that the oratorical display of women is far more pronounced

among proletarians than among bourgeois class. Already these women of progressive views have organized two associations aimed at acquiring suffrage for women. Needless to say that women's organizations for promoting philanthropic, social, and similar causes are many and diverse. Of these one of the latest is a Y.W.A. created in October 1927 under the encouragement of the Department of Education as a complement to the Y.M.A. already in existence, treated elsewhere. The Department aims to foster sound thought among young generation.

In respect to the relative length of the roll of membership the Federation of Ladies Societies in Western Japan created in 1919 under the auspices of the Asahi stands foremost with over 3 million members, and next comes the Ladies Patriotic Society supported by half a million members. Both are social and philanthropic in aim. The National Female Teachers Union joined by over 20,000 out of the total force of approximately 70,000 in the country is showing great energy for promoting the position of those professionals in particular and of women in general.

Women as Bread Winners

With the recent expansion of their field of activity, the number of women clerks in Japan has considerably increased of late. Women are in greater demand than men, as the salaries offered them are less than for men.

The first official census returns show that number of women as bread winners throughout Japan proper stood at 8,167,000 against 7,803,000 male workers. Classified by kind of occupation and giving only those occupations employing over 100,000 women workers the following table is obtained:

Agriculture	5,895,000
Industry	1,199,000
Trade	586,000
Gov. service	122,000
Other occupations	174,000

The Labor Statistics from which the above is quoted gives figures for Fishery, Mining and Communications, all under 100,000. It may be stated that Japan's productive population, i.e. those of 15 to 60 years old, occupies about 55% of the total, males 27.62 and females 27.44.

LOCAL YOUNG MEN'S LEAGUE

These are young men's patriotic institutions derived in principle from the local young men's associations that were first created at Kamakura toward the end of the 12th century with the object of promoting and protecting the public welfare and the interests of different localities. To adapt themselves to the need of the times, the young men's leagues of today serve as something like auxiliary organs for helping the development of local autonomy. They are, for instance, doing various useful works such as attending to the promotion of the welfare and happiness

of local people, spread of education and advancement of culture, relief of the poor, exploiting wild land, road-making and so forth. Encouragement and guidance have been extended them by the authorities, and stimulated by the strong patriotic sense which was the growth of the wars of 1884-5 and 1904-5 they have spread all over the realm. At the end of March '25 14,885 such leagues existed throughout the country with a total membership of 2,544,734, the year's estimated outlay amounting to ¥2,744,068. One thing noteworthy is that they are in close touch with the Imperial Court and the memory of Emperor Meiji. The Meiji Shrine's outer court has been placed at their disposal for erecting the "Nippon Seinen Kan" (Japan Young Men's Hall), while every autumn the League gives a grand national athletic meeting at the stadium in the same court. A similar league of young women's associations throughout the country was formed in October 1927.

ELEEMOSYNARY WORK

Administrative Organs

The administrative arrangement for dealing with matters relating to relief and reformatory works has been repeatedly remodelled and enlarged in view of the steadily widening scope of charity, relief and social business demanding Government attention.

As regards legislative measures for eleemosynary and similar purposes, there are, to mention those that are now in force, relief arrangement for the destitute and helpless, treatment of unclaimed travellers fallen sick or who die, succor of sufferers from natural calamities, protection of persons afflicted by insanity and tuberculosis, reform of refractory boys, provision for controlling lepers, aids to private charity work, training of officials and others connected with such work, education of blind, deaf and mute, protection of discharged prisoners.

STATE AND COMMUNAL RELIEF FOR PAUPERS

The relief rules announced in 1874 provide that decrepit persons, infants, disabled persons and invalids with no relatives to care for them may be granted relief as follows:—

Decrepit (above 70 years old) or	
disabled person	1.8 koku of rice per year.
Infant (under 13)	0.7 koku of rice per year.
Invalid ..	3 go of rice for man and 2 go for woman per day.

To those who take care of foundlings 0.7 koku of rice may be granted per head every year for bringing them up.

(1 koku=5.12 American bushels. 1 go=1/1000 koku.)

Paupers and foundlings given relief under the above rules at the State and communal expenses and cases of destitute sick travellers attended to by the local authorities are as follows:—

Year	Paupers		Friendly societies		Sick travellers	
	No.	Disb. by state and communes	No.	Disb. by state and communes	No.	Disb. by communes
1919	7,880	334,562	1,892	84,683	1,979	258,021
1920	7,565	427,053	1,128	116,321	1,881	285,453
1922	7,908	443,395	755	120,681	2,013	389,067
1923	7,574	431,493	666	96,439	2,288	390,194
1924	8,111	446,763	682	92,735	2,433	390,194

Relief to Sufferers from Natural Calamities

The law of 1899 relating to relief funds for sufferers from extreme calamity provides that each prefecture should lay aside a sum of not less than ¥500,000 as a fund for giving relief when such calamity overtakes the whole or part of its jurisdiction. When the amount of the relief exceeds 5 per cent. of the funds at the beginning of the year one-third of the sum thus disbursed is supplied by the State Treasury. The aggregate funds in hand on April 1st 1923 amounted to ¥67,006,728. The total disbursements from the funds for the three years ending March 1923 are as follows:—

Year ended March	Shelter	Food	Clothing	Medicine	Temporary lodgings	Providing work	Total incl. others
1920 ..	4,719	119,425	17,376	224	61,412	20,117	229,613
1922 ..	4,512	173,405	19,465	958	36,400	52,173	292,283
1923 ..	19,689	84,360	15,722	633	30,705	62,134	224,699

Social Work Summarized

The social undertakings either under State, communal or private management made the following record as at the end of 1925:—

	No. of establishments	Funds existing	Expenses	No. of beneficiaries
Controlling organizations ..	42	¥ 481,659	¥ 264,014	—
Charity hospitals	39	8,439,993	1,439,773	*2,203,289
Lunatic asylums	3	163,950	460,542	* 207,772
Tuberculosis hospitals	4	404,163	297,723	* 152,212
Leper hospitals	11	123,544	896,787	* 690,006
Est'ts giving med. treatment free or at cost.....	53	831,575	1,225,892	*2,851,209
Relief to families of soldiers in service or deceased	15	48,180,979	6,941,262	—
Military relief	—	—	915,064	29,118
Intelligence offices	140	1,368,291	526,260	638,172
Providing work	27	898,404	600,922	—
Providing shelter	46	585,866	130,745	601,354
Public markets	409	—	—	37,925,207
Housing	12	30,677	54,469	**1,532
Dining halls	73	—	—	10,015,963
Public bathhouses	266	—	—	18,202,528
Public pawnshops	41	—	849,000	—
Relief for aged.....	27	1,979,268	690,256	2,235
Relief for paupers or sufferers from calamity.....	—	—	431,493	11,565
Nurseries	116	1,261,895	338,217	14,774

Ragged schools	71	707,192	249,822	17,667
Schools for nurse-maids....	11	21,709	6,746	692
Orphanages, etc.	115	5,378,408	1,256,139	5,626
Schools for blind and deaf-mutes	81	3,348,209	532,074	6,255
Schools for feeble-minded..	4	1,011,658	61,349	92
Protection of school-children	13	78,959	25,735	670
Correction of stammering..	2	57,720	13,501	171
Protection of laborers' children	4	1,000	1,415	320
Child welfare offices.....	11	34,901	41,159	41,373
Free maternity hospitals...	15	134,749	107,814	15,532
Reformatories	55	—	666,566	3,023
Settlement work	5	49,000	3,656	—
Protection of women.....	10	77,644	41,283	2,864
Personal consultation offices	16	—	194	†3,821
Miscellaneous	60	2,376,664	328,231	—

Note.—* Received counted by number of days; ** no. of families; † no. of cases.

The number of establishments does not coincide with the real number of charity bodies as one or more works are often combined in one institution.

The Communist Affair in Japan

Early in April 1928 the Ministry of Justice made a startling revelation that over 1,000 Communists had been arrested in various parts of the country in the previous month on the charge of plotting communistic conspiracy. The case being still sub judice no authentic particulars are available yet and meanwhile the salient features of the alleged subversive conspiracy are quoted here from the statement issued on that occasion. It says that the Japan Communist Party was organized as the Japan Branch of the Third International in 1922, but in consequence of a raid made in May the following year its activities were apparently discouraged. The party reorganized itself in 1924 and by 1926 many members had been enlisted, and at the Goshiki spa in Yamagata-ken an inaugural meeting was held in December of the year. In February 1927 several of the leaders secretly visited Soviet Russia and elaborated a working plan under the guidance of the Third International. They started active propaganda on returning home, plotting the bolshevisation of young people and troops. The party made each factory a "cell" for pushing its propaganda with the aim of plunging the Empire into the vortex of a world revolution and of effecting a radical change in the national constitution. With a view to attaining its object the party strove hard to set up candidates in the last manhood suffrage election and did utmost to support the ten candidates proposed by the Rono-to, which was regarded as the tool of the party. (Two of them were returned.—Ed. J.Y.B.) The party was publishing central and district organs, etc.

It should be noted that before the last raid the Communists in Japan generally existed in public mind as followers of Marxian and similar economic doctrines appealing to an insignificant

section of young scholars and university students. The Government, determined to nip the evil in the bud, did not neglect to exercise vigilant watch over the spread of what was considered ideas inadmissible in the peculiar national system of Japan which is centred around the Imperial Household, this stern policy of the Government having been shown repeatedly in the active censoring of magazine articles and in serious cases in the cashiering of young university professors holding communistic notions or even arresting, as witness the case that happened in the Kyoto Imp. University last year, a number of their pupils. The first systematic raid was made by the Metropolitan Police in 1923 when T. Sakai, one of the pioneer socialists in Japan, and ten others were arrested. On the occasion of the second and far more extensive raid carried out on March 13, 1928 the Rono-to, labor party holding extreme views, and two other similar bodies were ordered dissolution. It is reported that the discovery of seditious handbills on the occasion of the last general Parliamentary election in Kagawa and the departure of the troops to Tsinan in June 1928 made it necessary for the Police to adopt a drastic measure. Then the Third International propaganda having been discovered in the last raid the Tokyo Government lodged an informal protest with the Soviet Government at Moscow complaining that the practice was breach of treaty, further pointing out that the Russian Third International had directed the Japanese Communist Party and the Russian Communist University had taken under its protection over 60 Japanese students, etc. Moscow's reply was evasive and was to the effect that the Third International being a body quite distinct from the Russian Government the latter could not be held responsible for the propaganda undertaken by the other.

At home the Government has elaborated a comprehensive repressive program in relation with executive, legislative and educational aspects. For dealing with this thought affair a special service section has been created in the Home Office and in every prefecture, and Shanghai, London and Berlin are also to be covered by a special agent each. To provide for all this fine spy system ¥2 millions were voted in the special session held in April '28. The Procurators offices at all the important places will also have similar functionaries to work in coordination with the Police secret service.

The Peace Preservation Law was amended in July as an emergency measure, so that an offence aimed at altering the national polity be made punishable with death, whereas the Law as it stood could punish an offender at the utmost with imprisonment with or without hard labor for a term not exceeding ten years.

Resolute step, punitive and precautionary, has been taken with the educational circles. Seven or eight Professors of Imperial Universities suspected to hold radical notions were told to tender resignation, about twenty students of similar leaning were expelled, while all students organizations for investigating Marxian and similar doctrines were broken up. Naturally students class is excited over what they consider denial of free discussion but their agitation is of little avail against the adamant front presented by the authorities. The Army and

Navy too appear not to be innocuous in this respect, some twelve suspected officers, mostly cadets, so far arrested. Of the total arrests numbering over 1,000 including four or five girl students, some 220 are said to have been prosecuted, and it is reported that the ringleaders, five or six, are still at large, and are believed to have fled abroad. One of them was formerly a Professor at a State high institution.

Control of "Patriotic" Bullies.—The appearance of Communists and other radicals has been taken advantage of by those bullies given to judo and other native physical art to organize "society" avowing chauvinistic ideas but too often practising blackmail at the slightest excuse. These stalwarts, posing as ally of the Police in the work of repressing the "dangerous thoughts" take every opportunity of harassing and maltreating those who are believed to advocate the extreme views. The Police has very often overlooked their outrageous acts from one or other consideration, but it is reported that the Procurators, seeing the growing rampancy of the self-styled "defenders of the Imperial Court," have now decided to step in in the interest of order. It is said that in Tokyo alone over 75 such bodies exist with the membership numbering 53,000.

CHAPTER XIV

JUSTICE, PRISONS AND POLICE

1. Justice

THE JUDICIAL SYSTEM

The Japanese Courts consist of (1) Local Courts (Ku-Saibansho), (2) District Courts (Chiho-Saibansho), (3) Courts of Appeal (Koso-in), and (4) the Supreme Court (Daishin-in). The Local Courts are held by single judges; District Courts and Courts of Appeal are collegiate courts, divided into several divisions, each consisting of three judges; and the Supreme Court is a collegiate court, also divided into divisions, in each of which five judges sit. All the courts have both civil and criminal jurisdiction, but the scope of jurisdiction possessed by the various classes is defined by law. In addition to the ordinary courts there is one called the Court of Administrative Litigation (Gyosei-Saibansho) which tries actions brought by the injured party to protest against encroachment upon individual right by an illegal administrative disposition.

Actions.—(1) Procedure in Court. All proceedings are oral, unless it is otherwise provided by law. For persons unacquainted with the Japanese language an interpreter must be provided. In an action to which a foreigner is a party, the oral proceedings may be in a foreign language, if the officials and all the other persons concerned are acquainted with such language, but no instance of an actual application of this provision of the law has ever been known.

(2) Appeal, Revision and Complaint.—An appeal lies against a judgment rendered in first instance by a District Court or a Local Court. It must be lodged within one month from the service of the judgment. Proceedings before the Court of Appeal are oral, and new allegations of facts and new evidence may be introduced.

Revision applies to judgments rendered in the second instance by a District Court or a Court of Appeal. It is only for errors in law. The time for claiming revision is the same as for appeal.

Complaint can be made against any ruling or order of the court other than a judgment, by which an application relating to the proceedings is refused, and in such other cases as are prescribed by law. A decision on a complaint is generally made without oral proceedings. No period is fixed for a complaint, except that in certain cases an immediate complaint is provided for, which must be made within one week from the service of the order or ruling.

(3) Summary Proceedings.—When a claim is for a fixed sum of money, or for the presentation of a fixed quantity of other

tangible things, or of securities, the creditor, instead of bringing an action, may apply to the Local Court of the general forum of the debtor, or if the claim is secured by a lien on an immovable of the real forum, to make an "order of payment" against the debtor. The latter may object to this order within two weeks after it is served upon him, or at any time before an order of execution is made. If he does not do so an order will be made for the execution of the order of payment.

Acknowledgments.—These can be made in the presence of a Notary Public, but the drawback to employing a Notary is that the proceedings must be conducted in the Japanese language, and that the Notary's act must be recorded in Japanese script, thus entailing much troublesome work. Among foreigners resident in Japan, the custom is to make acknowledgments before their respective Consuls, but the documents so acknowledged are neither deemed to be "Notarial Deeds" by the Courts, nor to possess evidential value in judicial sense.

Costs in Civil Procedure.—These are paid by means of adhesive stamps affixed to the original petitions. Costs of First Instance are:—

	Value of the subject-matter Yen	Stamp duty Yen
Not exceeding	500	12.00
" "	750	15.00
" "	1,000	18.00
" "	2,500	25.00
" "	5,000	30.00

For amounts exceeding 5,000 yen—three (3) yen is to be added for each ¥1,000. If the value of the suit was—e.g.—¥50,000, the costs would be ¥30 for the first ¥5,000 and ¥3 per each subsequent ¥1,000—i.e.—¥30 plus (45 by 3=¥135)=¥165.

Costs of Appeal Instance are the same as stated above, but with a surcharge of 50 per cent. added thereto.

Costs in the Supreme Court are double those in first instance.

Sundry Fees. The law provides for certain small fees to be paid in respect to incidental petitions and statements varying from 20 sen to ¥1 each.

Process-Servers' Fees depend upon the work entailed, as provided for in the law. All papers must be served by an official Process-Server.

Lawyers' Fees. There is no official scale, and the question of fees is one of custom and arrangement. As a rule, the Japanese lawyers charge on the basis of a percentage which varies with the difficulty and importance of the case, the value of the subject-matter of the suit, the time taken up, etc. The professional standing of the practitioner has also to be taken into consideration. Speaking generally, law-suits are necessarily costly because all foreign exhibits must be translated into the Japanese language, and because the amount of time frittered away over even the most simple cases is such that a lawyer cannot afford to handle them without adequate remuneration, the upshot being that small causes, which should entail only very trifling fees, often result in legal bills disproportionate to the interests involved. It must also be borne in mind that the party defeated

is only bound to pay the "judicial costs" occasioned by the suit, and that these do not include the lawyer's fees, as between solicitor and client, incurred by the successful party.

Composition of Courts at End of 1926

	Supreme	Appeal	District	Local	Total
No. of Courts.....	1	7	15	281	304
No. of Judges.....	46	89	1,061		1,196
Procurators	9	32	532		583

Number of Civil Cases in 1925

Courts	Kind of cases	No. of cases	Cases disposed of	Cases remaining in hand
Local* ..	1st instance	681,895	604,999	76,896
	Retrial	13	10	3
District.....	1st instance	76,735	44,879	31,856
	Trial for appeal.....	12,224	6,336	5,888
	Trial for complaint...	3,824	3,149	675
	Total	92,783	54,364	38,419
	Retrial	32	22	10
Appeal	Trial for appeal.....	10,198	4,374	5,824
	Trial for revision.....	2	—	2
	Trial for complaint...	159	141	18
	Special trial	5	4	1
	Total	10,364	4,519	5,845
Supreme	Retrial	7	2	5
	Trial for revision.....	1,725	1,292	463
	Trial for complaint...	1,296	1,270	26
	Total	3,021	2,532	489
Total cases†.	Retrial	4	4	—
	1st instance	338,904	231,837	107,067
	Trial for appeal.....	22,422	10,710	11,712
	Trial for revision.....	1,727	1,262	465
	Trial for complaint...	5,279	4,560	719
	Total	368,332	248,369	119,963
	Retrial	56	38	18

*includes reconciliations, summary procedures, ordinary cases, suits on documents and bills of provisional seizures and dispositions, etc.

†includes all the cases in various trials except reconciliations, summary procedures, public summons, motions for provisional seizures and dispositions, etc. Special trial in Appeal Courts is included in the first instance.

Civil Cases Disposed Of

	Year	Total no of cases	Cases decided	With-drawn	Recon-ciled	In other ways	Remaining in hand
Cases of 1st in-stance	1922	283,804	81,224	49,888	23,337	57,160	72,195
	1923	315,914	90,690	55,106	24,205	62,026	83,887
	1924	355,125	102,532	61,841	29,348	66,737	94,667
	1925	383,588	113,387	65,326	29,881	69,495	103,078
	1926	406,994	120,217	68,030	36,391	73,923	108,433
	Average.	349,072	101,486	60,057	29,232	65,867	92,450

		Year	Total no. of cases	Quashed	Re- jected	With- drawn	Recon- ciled	In other ways	Remain- ing in hand
Cases appealed	{	1922	15,436	1,489	3,588	2,045	668	44	7,602
		1923	16,274	1,408	3,649	2,089	731	45	8,352
		1924	18,260	1,522	4,133	2,319	916	54	9,316
		1925	19,958	1,605	4,275	2,523	1,014	72	10,469
		1926	22,422	1,814	4,817	2,806	1,198	75	11,712
		Average ..	18,469	1,567	4,092	2,356	906	58	9,491

		Year	Total no. of cases	Quashed	Rejected	With- drawn	Reconciled or in other ways	Remain- ing in hand
Cases com- plained	{	1922	2,051	1,253	242	184	87	335
		1923	2,661	1,710	347	156	49	399
		1924	3,499	2,285	360	266	55	532
		1925	4,007	2,608	341	272	59	727
		1926	5,298	3,720	495	299	84	720
		Average..	3,503	2,310	356	235	57	543
Cases demand- ing revision	{	1922	1,354	175	781	95	—	302
		1923	1,334	153	643	111	1	427
		1924	1,569	196	806	166	—	401
		1925	1,599	223	868	156	—	352
		1926	1,727	210	884	168	—	465
		Average..	1,516	192	796	139	—	389

Nature of Civil Cases Settled at 1st Instance

Year	No. of cases	Per- sonal	Buildings Land & ships	Money	Cereals	Goods	Docu- ments	Others
1922	211,609	5,032	5,095	8,528	123,816	1,353	2,976	544 64,265
1923	232,025	4,690	4,861	8,427	139,802	1,467	3,182	491 69,105
1924	260,434	4,916	5,656	9,220	158,300	2,263	3,233	590 76,256
1925	280,506	5,366	6,205	9,813	172,063	2,857	3,233	593 80,199
1926	298,565	5,384	6,894	11,681	183,471	2,594	3,419	639 84,483
Average ..	256,622	5,077	5,742	9,533	155,490	2,107	3,244	572 74,857

Cases of Bankruptcy and Rehabilitation

		Adjudicated for Bankruptcy							Rehabilitation	
Year	No. of cases	Indi- vidual	Partner- ship		Joint stock Co.	Total	Cases re- maining in hand	Amount of credit	Sanctioned Rejected	
			Part- nership	Ltd.					Sanctioned	Rejected
1922 ..	730	106	2	11	36	155	575	10,809,531	7	1
1923 ..	722	97	1	16	29	143	579	5,637,421	3	1
1924 ..	609	46	5	5	8	64	545	2,416,049	5	—
1925 ..	548	23	3	2	8	36	512	2,133,031	6	1
1926 ..	512	28	—	2	12	42	470	5,239,985	6	—
Average	624	60	2	7	19	88	536	5,247,204	5	1

Cases of Insolvency and Rehabilitation

Year	No. of cases	No. of debtors	No. of creditors	Amount of credit	Rehabilitation	
					Sanctioned	Rejected
1922	404	437	431	1,123,240	73	1
1923	2	2	2	2,066	24	2
1924	—	—	—	—	14	1
1925	—	—	—	—	9	1
1926	—	—	—	—	17	3
Average	81	88	87	225,061	27	2

Criminal Cases

Daily life constitutes an important factor in awarding judgment on cases of criminal offences according to the revised code put in force in 1909 and professional gamblers, pickpockets and other scum of society are visited with graver sentences than was possible under the old code. Chiefs of gamblers, pickpockets and others in Tokyo and elsewhere who used to levy percentage on their followers and were leading very luxurious lives with impunity have even been sentenced to as long as 15 years. Sentences inflicted on these classes being generally much longer, the number of prison inmates suddenly increased for some period after the enforcement of the new code.

The condition of criminal cases handled in course of three years of latest available figures is as follows:—

		No. of cases	No. of cases disposed of	No. of cases in hand
Search carried out.	{ 1923	303,459	299,008	4,451
	{ 1924	324,921	320,346	4,575
	{ 1925	365,450	360,025	5,425
Preliminary trial...	{ 1923	4,210	3,740	470
	{ 1924	4,121	3,548	573
	{ 1925	4,499	3,839	660
Summary judgment.	{ 1923	56,092	54,622	1,470
	{ 1924	59,387	58,850	539
	{ 1925	65,685	65,098	587
First instance	{ 1923	31,398	27,184	4,214
	{ 1924	29,656	27,445	2,211
	{ 1925	31,987	29,785	2,202
Appeal trial	{ 1923	7,568	6,378	1,190
	{ 1924	7,930	7,043	889
	{ 1925	7,325	6,446	879
Trial for complaint	{ 1923	2,422	1,940	482
	{ 1924	2,882	2,448	434
	{ 1925	2,583	2,132	451
Cases for complaint.	{ 1923	41	40	1
	{ 1924	86	84	2
	{ 1925	89	83	6
Revision trial.....	{ 1923	24	23	1
	{ 1924	42	39	3
	{ 1925	44	37	7
Grand total	{ 1923	405,214	392,935	12,279
	{ 1924	429,025	419,803	9,222
	{ 1925	477,662	467,445	10,217

Sentence Carried Out

	Year	No. of offenders	Capital punishment	Imprisonment and confinement	Penalty fine, etc.	Total	Offenders per 100,000 population
Decision at 1st Instance	{ 1923	37,153	—	25,562	10,423	35,985	64
	{ 1924	39,507	17	27,172	11,143	38,332	66
	{ 1925	38,827	29	29,740	8,097	37,866	65

	Year	No. of offenders	Capital punishment	Imprisonment and confinement	Penalty fine, etc.	Total	Offenders per 100,000 population
Summary Judgment	1923	93,754	—	—	93,754	93,754	159
	1924	107,905	—	—	107,905	107,905	182
	1925	114,364	—	—	114,364	114,364	191
Summary Judgment for Police offence	1923	419,138	—	50,487	348,284	398,771	715
	1924	528,125	—	70,356	407,500	477,856	890
	1925	632,416	—	—	584,825	584,825	1,055
Grand Total.	1923	550,045	—	76,049	452,461	528,510	938
	1924	675,537	17	97,528	526,548	624,093	1,138
	1925	785,731	29	29,740	707,410	737,179	1,311

Foreigners Criminal Cases

1925	Capital punishment	Imprisonment	Fine	Total
Criminal	1	103	98	202
Special	—	—	13	13
Total	1	103	111	215

AGE-LIMIT FOR JUDICIAL OFFICIALS

With the approval of the 1920-21 Diet age-limit for judicial officials has been inserted in the Constitution of the Court of Justice. The President of the Supreme Court, hitherto allowed to remain in office indefinitely, must retire when he attains 65 years of age while judges and procurators in general are to resign at 63 years. They may all be allowed to retain their office 5 years longer with the approval of a general meeting of the members of the Supreme Court or the Courts of Appeal.

JUVENILE COURTS

Opened on 1 Jan. 1923 there are only two Courts, in Tokyo and Osaka. The cases handled by them during the year 1927 are tabulated below:—

		No. of cases	Cases disposed of				Cases in hand
			Without trial	Placed under protection	Transferred to procurators	Finished	
1927	Male	13,325	8,871	4,326	4	12,720	605
	Female . . .	1,209	681	477	—	1,160	49
	Total	14,534	9,052	4,803	4	13,880	654
	Do for 1926	16,486	11,078	4,885	6	15,969	486

Jury System

The Jury System Law was promulgated in April, 1923, and enforced on Oct. 1 '28. The special feature of the Japanese system is that it does not authorise the jury to inquire into the

crimes, its function being only to decide whether the accused is guilty or not, so that its decision has no binding power on the opinions of the judges as is the case with the Occidental system.

The cases to be submitted to trial by jury are limited to crimes punishable with the death penalty, life servitude or imprisonment, or servitude or imprisonment for a period exceeding 3 years, all of which come under the jurisdiction of the "chiho-saibansho" or district courts. They are submitted to trial by jury only upon the request of the accused, such request being invalid unless it is made within 10 days from the date on which the accused receives summons for a public trial, and in case the accused confesses to the crime for which he was prosecuted the case will not go to a jury. The crimes mentioned hereunder are excluded:

Crimes committed by the members of the Imperial family; Cases of Lese Majeste; Crimes connected with civil war, or war with a foreign country, or prejudicial to international friendship; Crimes of sedition; Crimes stipulated for in the Army criminal law, the Navy criminal law and the military secret protection law; Crimes concerning public election.

The jury for each criminal case is made up of 12 members, selected from among Japanese male subjects of over 30 years, who have had their dwellings in the same city or town or village for over 2 years and are payers of direct tax not less than ¥3 and who can read and write. The judgment of the jury does not affect the judges who reserve the right to dismiss a jury and empanel another as often as they please if they were not satisfied with the verdict.

II. PRISONS AND PRISONERS

Just as in Western countries associate and solitary confinement arrangement is in force in Japanese prisons. All prisoners under the age of 18 are kept in cells different from those for older ages. Japanese generally living in a house which is practically one big room, though usually divided into a number of smaller rooms with sliding doors, the solitary confinement seems to be too sudden a change, and is apt to exert a morbid influence upon the prisoners. The solitary system is therefore sparingly enforced in Japan. Prisoners in penal servitude from compulsion and other inmates from option, are made to work at the workhouse, and rewards at certain rate are given. Workhouses are closed twelve days in a year, and a prisoner whose father or mother dies is allowed release from labor for three days. Moral instruction is given on holidays or Sundays, and ordinary education is given under 4 hours a day for prisoners of primary education grade and under 2 for those of higher grade. Those of still higher grade are left to their own devices, 3 books being allowed at one time, exclusive of a dictionary. The daily ration per capita of prisoners consists of .95 pint of inferior rice and barley mixture and side-dish costing not more than 10 sen. The bath is opened once in every 5 days in warm season and 7 days in the other. An interview, for 30 minutes or less, with relatives is allowed once every day for detention prisoners, once a month for those under sentence of imprisonment and

once every two months for those in penal servitude. The number of letters to be sent or received is one in every ten days for a detention criminal, one in every month for an imprisonment and one in every two months for a servitude criminal. Taken altogether, the national characteristic of simplicity and light-heartedness is reflected even on prison life, and while the management is less stern, prisoners look less gloomy and dejected than the convicts in Western prisons. Then Japanese prisoners appear to be more amenable to reform and better able to mix in society after discharge.

Number of Prison Inmates

Dec. 31	No. of prisons	Convicts	Criminal defendants	in separate cells	Infants	Total
1925	160	39,418	3,476	222	19	43,135
1926	160	39,513	2,982	239	9	42,743
1927	160	37,990	2,691	293	7	40,981

New Convicts Classified (1927)

Crime	Convicts	Crime	Convicts
Theft	21,188	Obscenity, illicit sexual intercourse, &c.	554
Gambling	633	Trespass into another's house	204
Fraud and usurpation...	4,748	Perjury	39
Forgery of documents...	626	Sedition	82
Battery & assaults.....	1,570	Abduction	166
Stolen goods concealed, &c.	214	Others	170
Murder	3,026	Military law	24
Burglary	2,546	Forestry law	19
Incendiary	1,597	Military summons	5
Disturbing official duty..	38	Post and telegraph rules	1
Concealment, &c.	—	Other laws	347
Forgery of coins.....	99	Total	37,990
Abortion	19		

Capital Punishments Classified

Year	Murder	Burglary	Incendiary	Illicit M. of Explosives	Total	Year	Murder	Burglary	Incendiary	Illicit M. of Explosives	Total
1919	23	16	4	—	43	1922	15	22	1	—	38
1920	14	20	1	—	35	1923	15	16	—	—	31
1921	22	26	1	—	49	1924	4	13	—	—	17

New Convicts Classified by Ages

Year	Under 18	18-20	21-30	31-40	41-50	51-60	Over 61	Total
1922	792	1,255	8,781	5,655	3,665	1,306	411	21,895
1923	564	1,034	8,427	5,311	3,205	1,174	358	20,073
1924	690	1,256	9,780	5,933	3,305	1,286	423	22,673
1925	737	1,464	10,256	6,500	3,571	1,441	463	24,435

New Convicts Classified by Education

Year	High school education	Middle school education	Elementary school education	Elementary school unfinished	Illiterate	Unknown	Total
1923 ..	68	820	11,974	5,904	1,276	31	20,073
1924 ..	81	1,047	14,581	5,680	1,251	33	22,673
1925 ..	85	1,021	16,096	5,906	1,293	40	24,435

New Convicts Classified by Property

Year	With property	With small property	Without property	Indigence	Unknown	Total
1923	171	1,219	14,909	3,673	101	20,073
1924	296	1,196	17,091	4,043	47	22,673
1925	162	1,237	18,071	4,881	84	24,435

Sick Rate and Mortality of Prison-Inmates

Year	No. sick inmates	Average No. of sick inmate per day	Sick rate per inmate per annum	No. of mortality	Mortality per 1,000 inmates
1923	62,574	171	1.54	450	10.4
1924	44,728	123	1.22	392	9.9
1925	42,021	115	1.02	320	7.4

Number of Prison-Inmates whose Names are Cancelled

Year	Serving out the term	Amnesty	Provisional release	Died	Escaped	Total
1923	23,635	—	1,515	512	390	26,052
1924	25,834	—	1,761	385	21	28,001
1925	24,726	—	1,345	326	11	27,375

Ratio of Prison-Officers and Prison-Inmates

Year	No. of officers, etc.	Inmates per officer	Male inmates per turnkey	Fem. inmates per female keeper
1923	7,905	5.6	6.0	6.7
1924	7,486	5.6	6.0	6.8
1925	7,747	5.9	6.4	6.1

Year	Number of workers (in 1000)			Wages (1000 yen)			Wages per day per capita (sen)		
	Gov't work	Cont. work	Trust work	Gov't work	Cont. work	Trust work	Gov't work	Cont. work	Trust work
1923	3,437	6,669	1,336	1,075	3,122	748	31.3	46.8	38.6
1924	3,349	5,937	1,777	1,090	2,958	686	32.6	49.8	38.6
1925	3,833	6,176	1,996	1,850	2,490	606	35.2	40.3	40.3

Wage earning rate of convicts stands still very low in Japan, compared with that in England and Germany, being 42 percent of U.S.A. Formosa, however, is an exception, for the wages earned by its convicts meet the expenses of maintenance, and its prisons are practically self-supporting.

Revenue of Prisons (in yen)

Year ended March	Ordinary			Total	Extra- ordinary	Total
	Earnings from labour	Rental of property	Other receipts			
1923	5,979,738	17,767	118,107	6,115,612	82,932	6,198,544
1924	5,928,972	915	14,320	5,944,207	42,476	5,988,570
1925	6,231,029	960	17,066	6,249,055	43,003	6,344,045
1926	5,684,317	887	14,398	5,699,602	43,738	5,744,557

Expenditure of Prisons (in yen)

Year ended March	Ordinary				Extra- ordinary	Total
	Salaries of officers	Wages and sundries	Expenses for inmates	Total with others		
1923	612,702	6,381,751	5,876,393	12,903,587	2,554,387	15,457,974
1924	613,120	6,333,684	7,131,447	14,087,904	3,010,814	17,008,718
1925	569,806	6,079,542	7,717,017	14,375,753	1,589,235	15,965,189
1926	570,370	6,078,548	5,313,630	11,971,254	2,190,658	14,161,912

Annual Earnings and Expenses per Prison-Inmate (in yen)

Year ended March	Income (Earning) of wages and works of inmates	Expenses		
		Ordinary	Extraordinary	Total
1917	46.645	112.625	9.834	122.459
1918	61.971	141.365	11.270	152.635
1919	83.747	162.542	13.966	176.508

III. POLICE

The Japanese policeman has generally earned a well deserved praise for integrity and clean-handedness. Exceptions may occur now and then, but the most important point is that, whereas in other countries, police constables are generally known to wink at peccadillos for a consideration, the rules and tradition in Japan bid these petty guardians of public peace sternly to uphold the honor of the service. Whenever a distinguished foreign visitor wishes to reward a policeman for a signal service rendered him the latter feels annoyed, and when the reward is received, with the cognition of his chief, owing to the insistent offer of the visitor, it is generally used for purposes of common benefits. With a pittance of a salary, ¥45-70 in the service of the Metropolitan Police Board, besides a petty allowance below ¥7, the lot of policemen is a sufficiently hard one, and they certainly deserve better treatment from the central and local treasuries. As a consolation, a policeman of diligent and meritorious services may rise to the post of a chief police commissioner drawing ¥900-2,400 a year. New policemen are admitted on examination, and they are then made to go through six months' training at regular headquarters. A Police Friendly Society is in operation for the purpose of mutual aid and protection.

Police Offences

Police offences are liable to detention not exceeding 20 days or fine under ¥20. Offences liable to detention are four, they

being hiding in others' building or ships, prostitution, vagrancy and intimidation. Offences liable to either detention or fines number 37, some of them are:—beggary and forced selling of anything, exaggerated or false advertisements, practical joke or obstruction to others' business or festival or other ceremonial procession, or obstructing traffic or disorderly act on the road, fortune-telling etc., practising hypnotism, tattooing one's own or other's body, intruding on scenes of fire, flood or other calamity, shadowing others without justification, mixing foreign ingredients in articles of food or drink, selling unripe fruits or rotten meat. Offences liable to fine number 17, some of which are:—wantonly discharging fire-arms, refusing summons of competent officers, when doctors and midwives refuse summons of clients, exposing shoulders bare, presenting any other indecent appearance, or committing a nuisance on the road, maltreating animals, etc. Police offences are summarily judged at police offices concerned, and this system dates from 1885. By the revised criminal code enforced in 1909 cases liable to this judgment are limited to those not more than 20 days' detention or to fines not exceeding ¥20. An attempt was made in the 1909-10 session of the Diet to abolish this police court judgement system and to transfer it to the jurisdiction of Local Courts, but the measure was not adopted.

Peace Police Regulation

The formation of societies or fraternities and public meetings of a political character are under the control of the Peace Police regulations in force since 1900. Any political association or fraternity must, according to the regulations, be duly reported to the police authorities concerned, within 3 days after its organization, together with the rules, articles of association, etc. When a public meeting or an open air meeting of a political character is to be held its promoter or promoters must apply in writing to the police authorities and obtain their permit. The Regulations forbid men in active service of the Army and Navy, those in reserve service temporarily called out, police officers, Shinto and Buddhist priests, teachers and students of schools, and minors to join or promote such societies or meetings. Women were also included in the list, but were expunged from it in the 1921-22 session, as a step towards their political emancipation. Art. 17 of the Regulations provides for the control of various labor movements.

Peace Preservation Law

The Peace Preservation Law, approved in the 50th session of the Diet, was put into force on May 11, 1925, with a view to providing against the spread and infusion of dangerous thought. The principal item of the Regulation is Article I, wherein it is provided that any one who has organized a society with the object of altering the national constitution (kokutai) or of repudiating the private property system, or any one who has joined such an organization with full knowledge of its object shall be liable to imprisonment with or without hard labor for a term not exceeding 10 years. Persons who attempt to commit such

acts, have discussed or instigated others as regards the execution of such acts, are also properly punished according to the law. The Regulation also applies to foreign residents and visitors.

As briefly explained in the Chapter on Social Problems & Facts the Government revised some provisions of the Law as an emergency Imperial ordinance in June '28. The measure evoked a strong opposition of the press and public opinion and was also hotly discussed by the Privy Council as to its propriety. The Cabinet insisted on its urgency and promulgated it on June 28. Under the revised law those who make attempts at altering the national constitution or repudiating the private property system, or those who have joined such organization with full knowledge of its object are to be meted with heavier penalties ranging from death to servitude of over 5 years. The ordinance took effect on the day of promulgation and will remain in force subject to post-facto approval of next session of the Diet.

Police Offices and Police Force

Police stations in Japan proper are subordinate to the Police Bureaux attached to the Prefectural governments except in Tokyo-fu where the Metropolitan Police Board is placed under control of the Home Office.

The recent condition is as follows:

	Offices includ. branches	Superintend- ing generals	Police inspectors	Assistant inspectors	Police men
1923	—	293	1,726	2,473	52,461
1924	1,261	268	1,665	2,643	53,966
1925	1,218	274	1,449	2,653	54,351

Suicides and Suicidal Acts

	1925		1924		1923	
	Male	Female	M.	F.	M.	F.
By hanging	4,388	1,896	4,075	1,687	3,919	1,708
„ drowning	1,559	2,028	1,304	1,917	1,401	1,832
„ edged tools	408	147	357	144	321	121
„ fire arms	99	16	106	10	127	17
„ poisons	947	856	941	888	1,048	900
„ being run over by trains	1,295	556	1,186	540	1,037	454
Total incl. others.	9,210	5,712	8,435	5,375	8,196	5,181

Principal Causes of Suicides

	1925		1924		1923	
	Male	Female	M.	F.	M.	F.
Mental derangement	2,004	1,153	1,916	1,145	1,888	991
From illness	2,129	1,363	2,069	1,431	2,609	1,479
Poverty or misery.....	464	160	394	124	298	120
Love or jealousy.....	278	384	257	312	261	314
Remorse	125	44	114	49	110	42
Domestic discord	177	320	169	291	184	308

Fear of detection of crimes or impending punishment	133	19	116	22	154	20
Pessimism	179	109	1,434	942	1,286	830
Business failure and debts.	224	17	200	26	198	23
Divorce	34	61	28	75	27	74
Total incl. others.....	9,210	5,712	8,435	5,375	8,198	5,184

Number of Suicides by Age

	Number		Ratio Percentage in 1,000	
	1924	1923	1924	1923
Total	11,261	11,488	1,000.0	1,000.0
10-14	100	108	8.9	9.4
15-19	1,142	1,214	101.4	105.7
20-24	1,746	1,820	155.0	158.4
25-29	1,121	1,138	99.5	99.1
30-34	796	786	70.7	68.4
35-39	700	734	62.2	63.9
40-44	770	757	68.4	65.9
45-49	765	811	67.9	70.6
50-54	715	649	63.5	56.5
55-59	745	782	66.2	68.1
60-69	1,386	1,371	123.1	119.3
Over 70	1,263	1,311	112.1	114.1
Unknown	12	7	1.1	0.6

No. of Sufferers from Robbery, Peculation and Fraud

Numbers of houses, boats or persons that suffered from robbery, fraud, etc. are as follows:—

Year	Robbery by force	Larceny	Pickpockets	Fraud and blackmailing
1923	940	211,367	4,399	78,645
1924	1,128	274,593	9,108	133,688
1925	1,717	315,338	10,888	114,405

Number of arrests made by police officers is classified as follows:—

Offence	1925	1924	1923
Riot	1,318	732	1,605
Incendiarism	13,395	12,553	11,021
Forgery of coins.....	94	104	69
Forgery of documents.....	672	537	631
Obscenity	2,190	1,809	2,666
Gambling and lottery.....	103,634	91,074	83,845
Disgrace of official honor.....	470	475	504
Murder	2,384	2,325	2,502
Battery and assaults.....	28,791	27,168	24,050
Accidental battery and assaults	8,039	7,240	6,205
Abortion	895	620	856
Desertion	298	243	265
Abduction	1,809	1,474	1,345
Larceny	88,554	78,900	69,062
Robbery by force.....	1,514	1,125	880
Fraud and blackmailing.....	63,689	54,083	49,677

Violation of military and naval laws	353	261	342
Violation of police regulations..	171,642	146,597	136,702
Violation of adm. rules.....	330,139	226,987	219,018
Total including others.....	1,078,203	874,939	808,626

UNNATURAL DEATHS

Offence		1925	1924	1923
Murdered		2,943	3,331	2,943
Accidental deaths {	Tidal waves	76	38	96
	Floods	5	7	121
	Shipwrecks	661	550	624
	Fires	359	415	15,450
	Earthquakes	394	40	23,708
	Snow or frozen.....	240	213	378
	Landslips, Collapsed houses, trees, etc.	208	259	324
	At mines	786	913	692
	Beasts and poisonous insects.	85	129	125
	Railway and tramcars, etc...	7,684	6,899	7,528
	Falling ill on the road.....	1,293	1,203	1,343
Total incl. others.....		19,103	19,168	64,042

Number of Foundlings

Year	Living		Found dead		Total		Total
	Male	Female	M.	F.	M.	F.	
1923	58	35	14	12	72	47	119
1924	59	57	25	19	84	76	160
1925	76	54	21	20	97	74	171

Fires

Year	No. of cases	No. of houses destroyed or damaged	Building area "taube"	Amount of damage Yen 1,000
1923	15,782	401,340	17,688,398	1,058,502
1924	17,474	18,573	415,054	62,448
1925	17,636	22,851	466,736	120,025

CRIMINAL CASES IN 1926-27

The Matsushima Licensed Quarter Scandal.—Soon after the close of the 51st session of the Diet in March '26 a criminal case known as the Matsushima Licensed Quarter Scandal was brought up before the Osaka District Court. It was a case of graft pure and simple and arose from the oft-tried and alluring design of removing the licensed quarter of Matsushima in the heart of the city of Osaka to a suburb. Among those implicated in this notorious scandal were a number of M.P.s who had collected no small sum of money from interested land-agents and others as fund for securing official permission for the removal. This explains why the local Governor, Minister and Vice-Minister of

Home Affairs of the time, Leaders of influential parties and some others were summoned as witnesses.

The Reconstruction Bureau Case.—Another notorious criminal case that attracted wide public attention was that in which a Department Chief of the Bureau, Kennosuke Inaba, the Director of the Financial Bureau of Gov. Railways, Shinji Sogo, and 12 others were involved. They were charged for having taken bribes from contractors, land-agents, and others in connection with the plots purchased by the Reconstruction Bureau or articles supplied by them. On 29 June all the recipients were sentenced to imprisonment for the term varying from 2 months to 1 y. 6 mos. and the givers to one of shorter term or a small fine. Most of the accused appealed.

Lese Majeste Case of Sociology Students.—37 young men, mostly students of the Gov. Kyoto and Tokyo Universities, and of various private institutions of high standing, all members of a sociological society, were arrested in April 1927 on the charge of lese majeste and for having infringed the Publication Law. They were judged guilty at the Kyoto District Court on May 30 and were sentenced to imprisonment for the term of one year to 8 months. One of the accused was a young peer who had resigned the title at his own accord.

16 M.P.s charged for Assault in the House.—The trouble originated in the disgraceful scene enacted in the House on 24 March when Dr. Kiyose, a Shinseikai Club M.P. and an Osaka lawyer of note, was assaulted by 16 M.P.s of Seiyukai as he was attacking Gen. Baron Tanaka, President of Seiyukai, about the secret fund pertaining to the Siberian Expeditionary Army when the General was Minister of War. The speaker and his friends were roughly handled by the 16 excited M.P.s and even slightly injured. Given to rowdiness as it too often is, the House presented on that particular day the most disgraceful scene unknown before. The motion of non-confidence in the President for incompetency was moved by the opposing partisans, and he resigned the post, the Vice-President following suit. The offenders were accused by Dr. Kiyose before the Tokyo District Court for assault and battery and for obstructing discharge of public duty, and in July ten of them were pronounced guilty by the Preliminary judge, the other six being acquitted.

CHAPTER XV

MEDICINE AND SANITATION

1. MEDICINE

Japan first came into contact with European civilization through medicine which was introduced, strictly speaking, by that pioneer Christian missionary, St. Francis Xavier who arrived in Kagoshima in 1549. Though medicine was to him and other missionaries nothing more than a useful expedient for promoting their work of evangelization, their peculiar medical teaching took firm root in such places as Osaka and Sakai, where this Western practice of medicine was known as Namban (South Barbarian) school as distinguished from Chinese school which was universally in vogue throughout the land. For about two centuries beginning with the middle of the 17th century, Nagasaki was the only point of contact which the semi-hermit Japan had with the outside world, and whither our young aspirants in medicine and other useful knowledge flocked from all parts of the country to get initiated into the wonderful arts and sciences by the doctors whom the small Dutch colony maintained for its benefit and for the enlightenment of such Japanese as came to them for instruction. Among the foreign doctors engaged by the colony were Thunberg (1776-77), Swedish, and von Siebold (1823-29), Austrian, who besides practising medicine and teaching it to native students, left valuable works on Japanese flora and other scientific subjects. But it was after the throwing open of the country to foreign intercourse that large number of Western medical scholars, either in combination with missionary work or as specialists, began to arrive in Japan. It is interesting to note that the first medical doctor engaged by the restored Imperial Government was an Englishman, Dr. William Willis, who was placed in charge of the first military hospital established in Tokyo. For the Naval hospital created some years after Dr. W. Anderson, the author of a famous work on Japanese fine art, was engaged. Among the Americans who contributed much to the development of the European school of medicine in Japan stand first Dr. J. C. Hepburn, the pioneer medical missionary sent to this country, also well known as compiler of the first Japanese-English dictionary; Dr. Alexander E. Vedder, an American naval surgeon who after resigning his post on board a warship opened practice in Yokohama, at the same time taking pupils; Dr. Eldridge, who came to Hokkaido with General Capron and rendered valuable service in framing our regulations and training our officers as regards quarantine. It may be added that the first dentist, as the term is now known, was also an American, Mr. Eastlake.

In the later stage in the history of development of Japanese medicine, German specialists almost held the field. For this preference of German physicians the advice which Dutch physicians in Nagasaki are said to have tendered to the authorities was responsible. These Germans took the place held by Englishmen

and Americans and also were given chairs in an Imperial university created in the meanwhile. When the graduates went abroad for further prosecution of studies they naturally choose Germany as the place of their sojourn, and though in naval surgery the British method and in dental surgery the American predominated, on the whole the Japanese medicine has taken the German system as its model. Among the German physicians who taught Japanese students, the names of Dr. Baelz for internal medicine and Dr. Scriba for surgery will long remain in the history of Japanese medicine.

Medical Practitioners, Dentists, Pharmacutists, etc.

Medical practitioners, dentists, pharmacutists, midwives, etc. must be those who have graduated from schools of recognized status or have passed an examination. At the end of 1926 the practitioners in Japan proper totalled 45,900, besides 31 foreigners and were classified as follows as to status;—university graduates 6,824; graduates of medical schools (Gov., public and private) 22,892; passed examination 13,625; from established right (in practice before the enforcement of the law), 2,255; others 164. Statistics for the other classes of professionals are as follows:—

	Dentists	Pharmacutists	Midwives	Nurses	Acupuncturists
1925	11,392	13,569	42,877	47,264	30,799
1926	12,548	14,826	44,776	44,852	66,755

The figures for nurses for 1926 include 76 males while those for acupuncturists include shampooers and moxicauterists. Of the latter 36,590 were blind and 30,165 not blind.

Hospitals

Hospitals occupy a most important part in the welfare scheme of Japanese people who, owing to inadequate provision even in the best families and to imperfect training of housewives in nursing, prefer to enter hospitals when cases are serious. Figures for 1926 are as follows:—

	No.	No. beds	Ave. no. in-patients per hospital	Ave. no. out-patients per hospital
Public	80	8,714	946.71	10,550.74

Private hospitals number 1,745; charity hospitals, 50; infectious diseases hospitals, 1,401 and isolation-wards, 7,744; hospitals for prostitutes, 149.

CHARITY HOSPITALS

Statistics for charity hospitals at the end of 1926 are as follows:—

	No.	No. beds	No. In-patients	No. Out-patients
Public & Private....	50	7,261	30,848	168,435

The following are some of the more important ones:

Saiseikai.—The work of this charity organization is now

divided into two kinds, one consisting in establishing free hospitals, and the other in distributing free tickets for treatment in the provinces. The fund subscribed by June, 1918, totalled about ¥24,302,400 of which over ¥15,117,500 is called. It has now hospitals, sanatoriums and dispensaries in Tokyo, Osaka, Kanagawa, Hyogo and Aichi prefectures. Work was started in May, 1912, and the number of patients treated in the hospitals in Tokyo alone during the year 1926 was 2,706 in-patients and 10,299 out-patients, the figures corresponding to 101,125 in-patients and 646,294 out-patients in number of days treated. In the provinces, patients treated during the same year totalled 22,680, corresponding to 658,669 in number of days treated. (Location, Shiba, Tokyo).

St. Luke's International Hospital.—The Institution was founded in 1895 by, and is under the direction of, the American Episcopal Church Mission. It cares for the sick and suffering of all people, irrespective of race, colour, language, or creed. Dr. S. Osada, the first director, was succeeded in 1900 by Dr. R. B. Teusler, the present director. The director receives his appointment from the Bishop who is the head of the Mission. The property of the Hospital is held by the foundation of American Episcopal Missionaries, and it also receives an annual appropriation from the Board of Missions of the Episcopal Church in America. The Hospital intends to accommodate 200 free patients and 100 paying patients. The staff consists of three or four foreign and 12 to 15 native doctors. In 1927 the hospital established a school for training female nurses under its control. (Location, Tsukiji, Tokyo).

Dojinkai.—The Society was founded in 1902 for diffusing medical knowledge in China and other Asiatic countries and to establish for that purpose free hospitals and to supply doctors and nurses. Maintains such hospitals at Peking, Seoul and about 30 other places to which 320 practitioners and nurses have been despatched. During the decade ended 1917 the society's hospitals cared for 213,936 days patients of all nationalities. The Hon. Pres. is Prince Kuni, Vice-Pres., Dr. Tamba. (Location, Kanda, Tokyo).

Izumibashi (Mitsui) Charity Hospital.—This is the largest private charity hospital in Japan and was founded by the Mitsui family which gave ¥1,250,000 for the purpose. The work began at the end of 1908. ¥1,500,000 was added in 1919 to the fund. During the year 1926 32,981 days' patients were received in the hospital besides 336,806 out-patients. The staff numbers 53. (Location, Kanda, Tokyo).

Tokyo Charity Hospital (Jikei-in).—This is a private inst. est. 1882; during the year ended Dec. 1926 had 44,457 in-patients, besides 144,073 out-patients in number of days treated; in March, 1921 possessed fund of ¥1,408,090, disbursing from ¥80,000 to 1,000,000 annually. The Hospital is under special patronage of the Court. Attached to the hospital is the Jikeikai Medical College, a private university founded in '81. (Location, Shiba, Tokyo).

The City Charity Hospital of Tokyo.—The Hospital was opened in 1911 at an estimated expense of ¥60,000 and with scope for 400 patients at one time. It is attended to by Naval surgeons.

In 1926 about 1,912 in-patients and 23,798 out-patients were given treatment. (Location, Tsukiji, Tokyo).

Leper Hospitals

It was by foreign missionaries that all the private asylums and hospitals for lepers were first founded in Japan, and it was through their agitation that both the public and the Government began to adopt definite arrangements for sheltering and segregating this unhappy class of fellow mortals. In the session for 1906-7 the Imperial Diet voted a measure for establishing five leper hospitals at State expenses, one each near Tokyo, Osaka, Kumamoto, Takamatsu and Aomori. The country is divided into 5 districts each of which has such a hospital. In December 1926 the inmates at the five Govt. leper hospitals numbered 2,541 besides 246 at private ones, distributed as follows:—

Zensei Hospital, Tokyo-fu (1st District).....	935	
Hokubu Hoyo-in, Aomori (2nd Dist.).....	177	
Sotojima Hoyo-in, Osaka-fu (3rd Dist.).....	508	
Oshima Ryoyojo, Kagawa prefecture (4th Dist.)....	332	
Kyushu Ryoyo-jo, Kumamoto (5th Dist.).....	589	
Total	2,541	
Fukusel Hospital, Shizuoka-ken	} (private).....	98
Tairo-in, Kumamoto		61
Kwaishun Hospital, Kumamoto		87

Lepers throughout Japan number some 25,000, but hospitals can at present accommodate only 6.4% of them.

Morphine & Cocaine & Salts; Medical Opium

All these drugs are placed under the strict control of the Home Minister who forbids their sale or transfer to any person other than specialists or those chemists who have secured a license for dealing in them. Opium is a Government monopoly, and for the export or import the sanction of the Home Minister is necessary. A small quantity of poppy is cultivated in Osaka and Wakayama prefectures.

Patent Medicine

The patent medicines on the register of the Home Office at the end of 1926 numbered 161,971 as against 124,304 in 1924 and 113,279 in 1923, while the retail-dealers in them numbered no less than 227,208 at the end of 1926 as against 225,058 and 203,396 in 1924 and 1923 respectively. The value of the revenue stamps as used on patent medicines amounted to ¥8,795,956 in 1921 and ¥8,246,648 in 1922, and as the stamps to be affixed are 10% of the declared value the total amount of such value was tenfold the stamp revenue as accruing to the Treasury. The stamp duty on patent medicines was, however, abolished in April, 1926.

II. SANITATION

Sanitation in the modern sense may be said to have its genesis in Japan in the despatch of Sensai Nagayo (d. 1910) to

America and Europe not long after the establishment of the Imperial Government to investigate matters of public hygiene. His mission forms the opening chapter of the history of our sanitation. It should, however, be noted before proceeding further that prior to that memorable incident Japan was indebted to the Dutch physicians in Nagasaki for vaccines.

As the existing system of sanitary administration stands, there is the Sanitary Bureau in the Home Office as a central organ for controlling all matters of public hygiene, and subordinate to it are a number of consulting bodies and also experimental or investigating institutes or laboratories. Thus the two Hygienic Laboratories, one in Tokyo and the other in Osaka, take charge of matters relative to medicines, foods, beverages, and hygienic examinations and investigations; the Institute for Alimentary Researches studies questions of national alimentation; the Central Board of Health presents its views in response to inquiry put by the Home Minister as regards public health or the health of domestic animals, and so on.

Epidemic Laboratories

Two epidemic laboratories exist in Tokyo, one affiliated to the Tokyo Imperial University and the other (private) conducted by Dr. Baron Kitazato, a noted bacteriologist. Epidemic research work in Japan, it should be mentioned, dates from his return in 1892 after prolonged study under Dr. Koch. At the instance of Yukichi Fukuzawa and the late Baron Morimura a laboratory was established in Tokyo with Dr. Kitazato as its director, and seven years later it was transferred to State control on the earnest recommendation of the late Dr. T. Hasegawa, then an M.P. From that time till its thorough reorganization in 1914, the Laboratory was the only centre of bacteriological research and training in Japan, almost all our medical experts having been initiated here into the theory and practice of this special investigation. When in 1914 the Laboratory was transferred from the Home Department to the Department of Education, the Director and all his assistants resigned and established the Kitazato Epidemic Laboratory. The Government Laboratory was placed in charge of the late Dr. Baron Aoyama, Dr. H. Hayashi, and others; it is now supervised by Dr. Nagayo, Prof. of the Medical College, Tokyo Imperial University.

Removal of Foul Matter

For 101 cities and two towns where the law for removal of foul matter is in force the average amount of such refuse removed per household in 1926 was 186.57 kan (1 kan=1,525 lb.) of rubbish, 48.59 kan of dirt, and 2.84 koku (1 koku=130.2 gal.) of night-soil. Roughly 2,664,725 households were cleaned of such matter, the filth removed totalling 497,145,676 kan of rubbish, 126,227,294 kan of dirt, and 4,086,945 koku of night-soil. Of the six premier cities of Tokyo, Osaka, Kyoto, Yokohama, Kobe and Nagoya, the average figure per household for 1925 and 1926 stands as follows:—

	1926 Average per household			1925 Average per household		
	Rubbish (kan)	Dirt (kan)	Night-soil (koku)	Rubbish (kan)	Dirt (kan)	Night-soil (koku)
Tokyo	179.59	111.56	1.53	185.88	92.89	1.54
Kyoto	149.58	29.35	0.75	151.54	31.95	0.79
Osaka	166.94	17.75	—	148.42	17.75	—
Yokohama	205.88	41.83	—	160.00	59.26	0.61
Kobe	232.96	88.64	8.85	232.75	80.57	9.56
Nagoya	164.38	8.43	5.50	157.49	8.72	5.50

Tuberculosis

The alarming spread of pulmonary tuberculosis recently has begun to draw the attention of both the Government and the public to the necessity of devising measures for fighting the evil. Even the Army and the Navy are not free from it, though the case is far more serious among the elementary school teachers. The Department of Education has discovered that in the two prefectures of Okayama and Fukushima about six teachers are affected per 100. The Government has ordained that teachers affected with diseases judged prejudicial to the health of pupils shall be granted medical allowance ranging from ¥50 to ¥250, and from ¥100 to ¥400 when they are permanently placed on the retired list.

In 1914 and 1919 a law was enacted for establishing sanatoria for consumptives in cities that have a population of more than 300,000, and for a city of at least 50,000 souls. The latter is to be established and maintained by a public corporation when the Home Minister judges its creation is necessary for the benefit of those who have no means to receive treatment. The National Treasury is to give a subsidy of 1-5 to 1-3 of the expenditures defrayed by the city. There are six sanatoria coming under the law, and eight others are in contemplation.

A tuberculosis research society was organized in 1916 with Dr. Kitazato as president, while in 1917 the Takeo Tuberculosis Laboratory at Osaka was opened.

In 1925-26, cases of pulmonary tuberculosis killed 81,546 as against 79,410 in the preceding year. What is significant about this dreaded disease is that of that number 31,328 were young persons of 15 to 24 years old, or about one half of the total, then those who were 25 to 29 years old numbered 11,220. Altogether the disease cut short the career of younger people whom the nation could ill spare. The toll of death from other tuberculous diseases in the same year numbered 34,410 of which those from 15 to 24 amounted to 13,289.

To check the spread of consumption which victimizes 217,927 throughout the country a number of smaller hospitals for treating the disease at early stages are about to be established by the Home Office at various important places. Regular hospitals for treating tubercular patients now number only 14 throughout the country with accommodation for about 2,000 patients. The Government is giving a subsidy of about ¥155,000 annually.

Burial and Cremation

Though existing grave-yards are generally left uninterfered with, those in newly-risen industrial towns have not unfrequently been removed by administrative order. A new cemetery must be laid out in a place at least 120 yards from the nearest dwelling houses. Cremation still claims a lesser half of all the bodies buried, being for 1926 44.0% to 56.0% for uncremated burials. Cremation gained 0.8% over the figure for 1925. The grave-yard occupies roughly 52,131.10 acres in Japan proper.

Vaccination

Vaccination is compulsory and is to be undergone twice, first in the period ending June of the following year of birth and next when the child completes its ninth year. For 1926 the total cases of the 1st period vaccination numbered 1,872,554 (of which 1,739,040 successful), while the 2nd period numbered 1,611,882 (931,097 successful).

Trachoma

Control of the infectious eye-disease trachoma is regulated by a law which provides, among other things, that the Treasury allows aids to a prefecture 1/6 of the expense incurred in enforcing preventive measures, while in turn a civic corporation is granted by the prefectural treasury 1/6 to 1/4 of its expenditure for similar purposes. The Home Office has trained a large number of specialists for fighting the spread of the disease.

Infectious Diseases

The infectious diseases as recognized by law are cholera, dysentery, typhus fever, scarlet fever, small-pox, exanthematous typhus, diphtheria (including croup), plague, paratyphus, and epidemic cerebrospinal meningitis. In 1920 the National Treasury spent on its own account for prevention of infectious diseases roughly ¥1,600,000 while the aids granted to the prefectures for the same purposes amounted to a little over ¥1,000,000.

Epidemic Mortality

		Enteric fever	Dysen- tery	Diph- theria	Small pox	Cholera	Pest	Total with other four
1924	{ Cases	58,368	18,647	13,116	1,702	—	7	100,426
	{ Deaths ...	12,605	7,234	3,179	266	—	6	24,898
1925	{ Cases	45,779	14,719	13,858	430	624	—	83,517
	{ Deaths ...	9,087	6,647	3,374	81	380	—	20,573
1926	{ Cases	43,951	17,135	13,655	1,256	25	8	84,247
	{ Deaths ...	8,879	7,698	3,354	174	13	6	21,128

Compared with the records for 1900 the number of cases in later years has shown a marked decline, except in the case of enteric fever. Thus the 24,942 cases of dysentery in 1900 compare with 17,135 in 1926, and 646 cases of pest in 1900 with only 8 in 1926. On the other hand enteric fever increased from 25,988 in 1900 to 58,368 in 1924 (43,951 in 1926).

The position of other and lesser epidemics in the record of national health, as measles, whooping-coughs, and influenza in 1925-26 is summarized below:—

Measles.—Deaths 15,438 of which children under four numbered 14,318.

Whooping-coughs.—Total mortality 8,456, of which children under four numbered 8,250.

Influenza.—Total mortality 10,806, of which children under four were 3,897; elderly persons of 70-79 years old 1,606; those from 60 to 69 years old, 1,268.

Total Number of Deaths Classified

Deaths through various causes totalled 1,254,946 in Japan proper in 1926, and of the number those under four years of age occupied 38%, the rest being those above 5 years. The mortality rate of young persons of 18 to 35 of age was rather high in 1918-1920 compared with the preceding years, but since 1921 the rate has gradually declined. As regards the causes diarrhoea and enteritis took the largest number of lives with 12%, followed by 11% of pneumonia and bronchial pneumonia, 10% of malformation and congenital weakness, 8% of cerebral hemorrhage and softening, 7% of tuberculosis, 6% of decrepitude and cases from external injuries, etc. and 4% of nephritis or Bright's disease. Next come in order the cases of heart troubles and ailment of digestive organs. The number of mortality in 1926, as classified by causes, is as follows:—

Diarrhoea & enteritis	Pneumonia & bronchial pneumonia	Malformation & congenital weakness	Cerebral hemorrhage, etc.
151,718	123,403	86,326	102,666
Tuberculosis	Decrepitude, etc.	Nephritis or Bright's disease	Total including others
114,229	74,003	62,227	1,254,946

Port Quarantine

The infectious diseases subject to inspection of quarantine officers are cholera, small-pox, scarlet fever, plague and yellow fever. The ports where such inspection is carried out are Yokohama, Osaka, Kobe, Nagasaki, Moji, Shimonoseki, Tsuruga, Wakamatsu, Milke and Kuchinotsu, and, in case deemed necessary, vessels coming from foreign ports, Korea and Formosa may be subjected to similar inspection at Karatsu, Hakodate, Yokkaichi, Nagoya and Kagoshima.

Prevention of Venereal Diseases

Local governors are under obligation to establish and supervise hospitals for giving treatment to those who are engaged in occupations that demand control from consideration of public morality. At the end of 1923 those pursuing this particular trade numbered 48,323 in Japan proper. The ratio of public prostitutes judged as suffering from disease was 1.92% in 1926 and the aver-

age number of times a prostitute was admitted into hospital was 1.52. The two extremes of the number of diseased was 3.77% for Osaka and 2.72% for Gifu, and 0.33% for Toyama and 0.45% for Miyazaki.

The Prevention Measures

The prevention law enacted in April '27 was partially enforced on September 1, '28. The law provides among other things that the authorities may order the establishment of hospitals of this special kind and grants aid of from $\frac{1}{6}$ to $\frac{1}{2}$ of the expenses required for their maintenance, and that those who violate the rules are liable to imprisonment of not more than 6 months or a fine not exceeding ¥500. The control of the special patent medicines is also covered by the law.

CHAPTER XVI

PRESS AND PUBLICATION

INTRODUCTORY REMARKS

Press

Journalism in Japan in its modern sense is little over fifty years old. But it had existed in a crude and incipient form for nearly three centuries. As soon as the country began to settle down in peace and quiet under the stern but benevolent administration of the Tokugawa Shogunate, there appeared in Yedo (present Tokyo) occasional news-letters containing the latest scandals in town and the happenings at the Shogun's court. These sheets were popularly called "Yomiuri," meaning "sold by hawking about" and were printed from wooden blocks. It was in memory of these historical sheets that the present "Yomiuri Shimbun" was named.

The first periodical publication which went under the name of a newspaper was the "Batavia Shimbun" printed in Yedo towards the close of the fiftieth year of last century. Its contents were mostly translations from Dutch papers published in Batavia. It was followed by "Shimbunshi" at Yokohama and the "Seiyō Zasshi," "Chugai Shimbun" and "Koko Shimbun" in Tokyo. None of these, however, was printed more than once a week.

The first Japanese daily newspaper made its appearance at Yokohama in 1871. It was called the "Yokohama Mainichi Shimbun." It was followed in quick succession by the "Nichi Nichi" in '72, "Hochi" in '73, "Yomiuri" in '74, and so on. The spread of education and the steady growth of wealth, combined with epoch-making events like the wars with China and Russia, and the inauguration of a representative system of government, have led in recent years to a remarkable development of the Press both in its influence and its circulation. There are now papers that claim a daily circulation of as much as a little over a million copies.

Deposit of Security.—Two things stand out conspicuous about the Japanese press, of which one is the necessity of depositing with the authorities by any daily or by a periodical discussing current politics a security ranging from 2,000 to 175 yen, according to the place or, in the case of a periodical, to the frequency of publication. This arrangement may be regarded as a sort of property qualification for eligible publishers, in that the Government possesses a lien right over the deposit whenever it has, by decision of a court of law, to exact fine or any other pecuniary obligation from them.

Dummy Editors.—Another peculiarity is that almost all our vernacular papers use dummy editors or publishers, this peculiar device being a relic of bygone days when the censors were authorized to fine or even imprison at their own discretion editors

or publishers for an article judged prejudicial to the public order or social decency.

Law.—With the advent of a Parliamentary regime the press regulations were radically amended conformably with the increasingly liberal spirit of the times, and at present no editor or publisher can be fined or otherwise punished except by a decision of a court of law. As amended in 1909 those who are amenable to law are:—

(1) One who actually edits the paper, as well as the nominal editor; (2) One who signs published matter; (3) In regard to a correction or contradiction of matter published, one who demands the insertion of the correction or contradiction.

The 13th article of the Press Law provides for the protection of the interests of private individuals, especially as regards libels. It entitles the party concerned to oblige the newspaper to insert a contradiction in one of the three following issues and using the same type as that in which the original paragraph appeared, and in columns equally conspicuous as those in which the offensive matter was printed. The contradiction must be accompanied by the name and address of sender and must not exceed the length of the original statement, any excess to be paid for at the journal's usual advertising rates. Failure to comply with this requirement involves a penalty of from ¥500 to 2,000.

The newspapers are not allowed to publish details of the preliminary examination of a criminal case before the case comes up for public trial; nor to publish matters relating to criminal cases under preliminary examination when their publication has been prohibited by procurators, nor the proceedings of law cases which are being heard in camera.

The prohibitive ordinances enforced in 1914 by the Foreign, War and Naval Departments in connection with military or diplomatic censorship in time of emergency were repealed on 11th Dec., 1922.

Prices.—The prices of dailies range between 2 and 5 sen per copy, the former rate being limited to provincial papers of four pages. Most papers are issued in the morning, but almost all leading papers in Tokyo and Osaka now issue evening editions except on Sundays.

Circulation and Capital

The daily volume of circulation of newspapers in Japan proper is roughly estimated at 5 million copies per day, i.e. 1 per 11 to 12 people, so that Japan may be said to occupy a respectable position in the world's statistics of newspaper subscribers. In the relative strength of individual papers as regards circulation the Osaka Asahi and Osaka Mainichi stand foremost with a daily circulation of over 1 million each. Even the best circulated paper of Tokyo hardly issues half as many.

The newspaper publication is now a highly risky enterprise, for one must be prepared to lose at least 2 million in starting a new daily. At present there are twelve newspaper cos. with subscribed capital of 1 to 5 million yen.

Advertisement Tariff

The tariff has naturally advanced very high and for papers with large circulation it ranges between ¥1 to 1.60 per line of 15 characters, the two leading Osaka papers exacting the higher rate. The revenue from this source reaches the neighborhood of ¥200,000 a month for some of the best earners. Some leading papers specialise in certain advertisements, for instance, the Tokyo Nichi Nichi ranking first in the line of publishers' advs.; the Chugai Shogyo as regards companies' balance-sheets and Government notices; and the Jiji for the total number of adv. lines inserted. Companies' reports are most acceptable to the newspapers, as they are allowed very little discount, and next come publishers' advs. Patent medicines, toilet articles, etc. are simply space-fillers and therefore yield relatively the least revenue.

Press Statistics

The following returns compiled by the Police Bureau give the number of dailies and periodicals existing at the end of the respective years:—

	With deposit			Without deposit		
	Newspapers	Periodicals	Total	Newspapers	Periodicals	Total
1925	1,139	3,600	4,739	328	1,832	2,160
1926	1,180	3,702	4,882	346	1,960	2,306
1927	1,241	3,951	5,192	344	2,320	2,664

Leading Dailies in Tokyo and Osaka

Chugai Shogyo Shimpō (est. '76)—Economic and commercial paper; independent; issues an evening edition. Pres. Yanada, Ed. S. Sato. Office, Nihombashi Kitajimacho, Tokyo. (Cap. ¥1,500,000).

Chuo-o Shimbun (est. '90)—Organ of the Seiyukai; issues an evening edition. Pres. T. Yamaguchi, Ed. K. Tamura. Office, Kojimachi, Tokyo. (Cap. ¥150,000).

Hochi Shimbun (est. '72)—Friendly to the Kenseikai. Issues an evening edition. Pres. C. Machida, Ed. T. Takata. Office, Yurakucho, Tokyo. (Cap. ¥1,100,000).

Jiji Shimpō (est. '82)—Started by the late Yukichi Fukuzawa; independent; issues an evening edition. Pres. K. Koyama; Ed. T. Akashi. Office, Marunouchi, Tokyo. (Cap. ¥4,500,000).

Kokumin Shimbun (est. '92)—Independent. Issues an evening edition. Prop. I. Tokutomi, Ed. S. Yamane. Office, Kyobashi, Tokyo. (Cap. ¥3,000,000).

Miyako Shimbun (est. '85)—Social paper popular among gay circles. Prop. E. Fukuda, Ed. S. Yamamoto. Office, Kojimachi Uchisaiwaicho, Tokyo. (Cap. ¥1,250,000).

Nippon (est. '25)—Independent. Prop. N. Bando, Ed. T. Ayakawa. Office, Kyobashi, Tokyo.

Niroku Shimpō (est. '18)—Independent. Issues an evening edition. Prop. S. Yano, Ed. K. Sato. Office, Shiba, Tokyo.

Osaka Asahi Shimbun (est. '81)—Independent. Issues an

evening edition. Prop. R. Murayama, Ed. M. Takahara. Office, Nakanoshima, Osaka. (Cap. ¥4,000,000).

Osaka Chugai Shogyo Shimpō (est. '25)—Independent. Osaka edition of the Chugai Shogyo Shimpō (Tokyo).

Osaka Jiji Shimpō (est. '95)—Independent. Osaka edition of the Jiji (Tokyo). Prop. K. Hori, Ed. Y. Uyesugi. Office, Sonezaki, Osaka.

Osaka Mainichi Shimbun (est. '89)—Independent. Issues an evening edition; also an English edition. Pres. H. Motoyama; Ed. S. Takaishi. Office, Kitaku, Osaka. (Cap. ¥5,000,000).

Osaka Nichi-Nichi Shimbun (est. '11)—Independent. Issues an evening edition. Prop. M. Yoshihiro, Ed. E. Yonekawa. Office, Kitahama, Osaka.

Tokyo Asahi Shimbun (est. '88)—Independent; a sister paper to the Osaka Asahi; issues an evening edition. Prop. R. Murayama; Ed. C. Murokata. Office, Marunouchi, Yuraku-cho, Tokyo.

Tokyo Maiyu Shimbun (est. '78)—Evening paper, friendly to the Seiyukai. Prop. M. Kimura, Ed. H. Namba. Office, Eiraku-cho, Marunouchi, Tokyo. (Cap. ¥320,000).

Tokyo Nichi-Nichi Shimbun (est. '72)—Independent, a sister paper to the Osaka Mainichi; issues an evening edition. Pres. H. Motoyama; Ed. Dr. M. Oka. Office, Yuraku-cho, Tokyo.

Yamato Shimbun (est. '74)—Friendly to the Kenseikai. Issues an evening edition. Prop. Y. Matsushita, Ed. Z. Tamura. Office, Kyobashi Sanjukkenbori, Tokyo.

Yomiuri Shimbun (est. '74)—Friendly to the Seiyu-honto. Prop. M. Shoriki, Ed. S. Zanaka. Office, Kyobashi, Tokyo. (Cap. ¥1,500,000).

Yorozu Choho (est. '92)—Independent. Issues an evening paper. Pres. T. Hidemura, Ed. K. Hasegawa. Office, Kyobashi Yumi-cho, Tokyo. (Cap. ¥1,000,000).

Leading English Newspapers

The publication of English papers by foreigners, mostly British and American, is a feature of journalism in Japan. What is particularly noteworthy about them is that several of them date much earlier in creation than the vernacular papers. The circulation being necessarily limited, subscription rate is comparatively high. (Prices per annum for daily.)

Japan Advertiser (est. '05)—At home ¥36.00; Abroad ¥50.00. Prop. B. W. Fleisher, Ed. Hugh Byas. Office, Kyobashi-ku Yamashitacho, Tokyo.

Japan Chronicle (est. '68)—(formerly Kobe Chronicle incorporated with Hyogo News). At home ¥33.00; Abroad ¥41.00. Weekly ¥15.00. Ed. A. M. Young, Pub. Y. Ozaki. Office, Naniwamachi, Kobe.

Japan Times (est. '97)—At home ¥25.00; Abroad ¥37.00. Pres. Y. Ito, Gen. Mng. and Ed. S. Sheba. Office, Kojimachi Uchisaiwaicho Ichome, Tokyo.

Kobe Herald & Osaka Gazette (est. '89)—At home ¥20.00; ¥26.00 abroad. Ed. S. C. Wilson; Publishers, Kobe & Osaka

Press Ltd. (Reg. Representative, Douglas M. Young. Office, 14-23 Naniwa-machi, Kobe.

Osaka Mainichi (English Edition) (est. '22)—At home ¥14.40; Abroad ¥20.40. Pres. H. Motoyama; Ed. M. Kono. Office, Nakano-shima, Kita-ku, Osaka.

Seoul Press (est. '10)—¥27.50. Pres. Miyoshi, Ed. Miyanaga. Office, Yamatocho, Seoul, Korea.

PERIODICALS PUBLISHED IN TOKYO

(m.—monthly. w.—weekly. f.—fortnightly. t.—thrice a month.

*—in English)

Title	Interests & subjects	Publishers
Bungei Club (m)	Literature	Hakubun-kwan
Bungei Shunju (m)	"	Bungei-Shunju-sha
Bunsho Club (m)	"	Shincho-sha
Chugaku Sei (m)	"	Hakubun-kwan
Chugaku Sekai (m)	Medicine	Chugai-iji-
Chugai Iji Shimpo (t)		shimpo-sha
Chuo-koron (m)	General	Chuo-koron-sha
"Diamond" (t)	Finance	"Diamond"-sha
"Economist" (f)	Eco.	Osaka Mainichi office
Eigo Seinen (f)	Study of English	Eigosainen-sha
Engel Gaho (m)	Theatrical	Engel Gaho-sha
Engel-Shincho (m)	"	Shincho-sha
Fujin-Gaho (m)	For women	Tokyo-sha
Fujin-kai (m)	"	Shimei-sha
Fujin-Koron (m)	"	Chuo-koron-sha
Fujin-Mondai (m)	"	Fujin-mondai-
		kenkyu-sha
Fujin-no-Tomo (m)	"	Fujin-no-tomo-sha
Fujin-Sekai (m)	"	Jitsugyo-no-
		Nihon-sha
Fujo-kai (m)	"	Fujo-kai-sha
Gaiko Jiho (f)	Diplomacy	Gaiko-Jiho-sha
Gakwan (m)	General	Gakwan-sha
Gendai (m)	"	Dai-Nihon-
		Yuben-kai
Hogaku-Kyokai	Law	Hogaku Kyokai
Zasshi (m)		(Tokyo Imp Univ.)
Hogaku-Ronso (m)	"	Kyoto Imp. Univ.
Horitsu Hyoron	Law	Horitsu Hyoron-sha
*Japan Magazine (m)	Things Japanese	J. M. Office
*Japan Medical	Medicine	J. M. W. Office
World (m)		
*Japan Review (f)	General	Japan Review Office
Jitsugyo-no-Nihon (f)	Eco. and trade	Jitsugyo-no-
		Nihon-sha
Jitsugyo-no-Sekai (m)	Eco.	Jitsugyo-no-
		sekal-sha
Jogaku Sekai (m)	For girls	Hakubun-kwan
Josei (m)	For women	"Puraton"-sha
Jutaku (m)	Housing	Jutaku-kairyo-kai
Kagaku Kogei (m)	Chemical Ind	Kagaku-kogei-sha

Title	Interests & subjects	Publishers
Kagaku Chishiki (m)	Natural science	Kagaku-chishiki-fukyu-kai
Kagaku Gaho (m)	"	Shinko-sha
Kaizo (m)	General	Kaizo-sha
"Camera" (m)	Photography	"Ars"-sha
Katsudo Zasshi (m)	Moving picture	Katsudo-zasshi-sha
Keizai-Ronso (m)	Economics	Kyoto Imp. Univ.
"King" (m)	General	Kodan-sha
Kodan Zasshi (m)	Story	Hakubun-kwan
Kokka (m)	Fine art rep'tion	Kokka-sha
Kokka-gakkai Zasshi (m)	Political science	Kokka-Gakkai
Kokumjin-Keizai Zasshi (m)	Eco.	Hobun-kwan
Kokusaiho-gaiko Zasshi (m)	Diplomacy	Kokusaiho-gakkai
Kyoiku Jiron (f)	Education	Kaihatsu-sha
Mita Bungaku (m)	Literature	Kelco Univ.
Nihon-no-Ikai (f)	Medicine	Nihon-no-Ikai-sha
Nihon-oyobi-Nihonjin (f)	Pol. & review	Seikyo-sha
Nihon Shonen (m)	For boys	Jitsugyo-no-Nihon-sha
Nogyo Sekai (m)	Agriculture	Hakubun-kwan
Omoshiro Club (m)	Popular	Kodan-sha
Rekishi Chiri (m)	History and geography	Rekishi Chiri-sha
Rikugo Zasshi (m)	Religion	Rikugo-zasshi-sha
Shashin Geijutsu Shakai-Seisaku-Jiho (m)	Photography	Toshi Shoten
Seisho-no-Kenkyu (m)	Social Pol. Religion	Kyocho-kwai Seisho-no-kenkyu-sha
Shakai-Kagaku (m)	Social science	Iwanami Book-Store
Shinri-Kenkyu (m)	Psychology	Shinri-gakkai
Kuroshio (m)	Literature	Shun-yo-do
Shojo-no-Tomo (m)	For girls	Hakubun-kwan
Shojo Sekai (m)	"	Jitsugyo-no-Nihon-sha
Shoko-Jiho (m)	Com. & Ind.	Shoko-jihō-sha
Shokubutsu Kenkyu Zasshi (m)	Botany	Tsumura Institute
Shonen (m)	Juvenile	Jiji Shimpō-sha
Shonen Sekai (m)	"	Hakubun-kwan
Shoten-Kai	Store management	Shotenkai-sha
Shufu-no-Tomo (m)	For women	Shufu-no-Tomo-sha
Shukujo-Gaho (m)	"	Hakubun-kwan
Telen (m)	Gardening	Telen Kyokai
Teliyu-Rinri-Koenshu (m)	Ethics	Dai-Nihon-Tosho-Kaisha
Tetsugaku-Kenkyu (m)	Philosophy	Iwanami Book-store
Tetsugaku-Zasshi (m)	"	"
Toa-no-Hikari (m)	Religion	Toa-no-Hikari-sha
Tokai-Shushu (m)	Statistics	Tokyo Tokaikyokai
Toyo Keizai	Eco.	Toyo Keizai office
*Trans-Pacific (w)	Com. & Ind.	Trans-Pacific office

Publication

Reprint of old costly works by subscription and on the instalment plan has of late become a special feature in publishing enterprise. On the whole, books are published at higher prices than before, for obvious reason. The statistics on books during the last few years available is:—

Year	Original works	Translation and others	Periodicals	Total
1923	10,945	10,596	18,409	39,950
1924	14,361	9,735	23,433	45,529
1925	18,028	12,844	25,636	56,508
1926	20,213	9,468	5,662	35,343
1927	19,967	9,576	33,715	63,258

N.B.—Official publications are excluded from the figures.

Classified as to subjects the following led the list of original works in 1927, omitting minor items:—

Politics, 600; economics, 379; social problem, 642; religion, 735; philosophy, 191; education, 3,244; literature, 3,276; language, 680; medicine, 480; geography, 679; history, 319; industry, 350; arts, 616; physics, 188; engineering, 350; music, 1,009; law, 530; miscellaneous, 4,221; total including others 19,967.

Publication by Subscription

Publication by subscription having been grossly abused and even made use of as means of fraud, a measure to deal with this special kind of publication was enacted as law in April 1910. The principal provisions are that the publisher is to deposit with the authorities as security a sum of ¥500 if the price is below ¥10 and of ¥1,000 if the price is above that sum.

Copyright

By the revised law enforced in 1910 and based on the resolution of the International Convention of Copyright held at Berne in 1908, the protection covered by the new legislative act has been considerably enlarged in scope. The law no longer requires the registration of copyright merely for purpose of protecting it against piracy, but registration is required when copyright is to be used as an object of pledge, and generally as an object of market value.

The fee is ¥10 for a book, 0.50 for a newspaper or periodical, 45 for a drama or photo.

Royalty

Royalty differs according to the kind of books and to the popular estimation of the authors, the rate ranging generally 10-20% of the published price of a book. One peculiarity in the Japanese publication is the attaching of the author's seal on the colophon of a book to guard his interest. In case the stipulation is made on the basis of royalty instead of selling manuscripts outright to the publisher, any book on sale without the author's seal impressed is considered an irregularity on the part of the publisher.

Censorship and Freedom of Discussion

As applied at present censorship is strict only to those articles or publications that are prejudicial to public order or good morals. In other words, the attention of censors is chiefly directed towards controlling the spread of rabid socialism, communism, and also ideas implying lese-majeste. Freedom of discussion, which too often invited official interference in former days is now treated with due respect. Opposition papers can attack a government policy with perfect impunity. It should be remembered that even at the time when the ministry was dominated by a military man, the Press sufficiently demonstrated its potency in fighting it and in making or unmaking cabinets. The collapse of the short-lived 3rd Katsura cabinet and the fall of the Yamamoto cabinet over the Navy scandal case were effected by the fierce attack of a majority of the Press in combination with the Opposition M.Ps. For the abortive attempt of Viscount Kiyoura to form a ministry with the countenance of Marshal Yamagata as a successor to the Yamamoto cabinet, and, on the other hand for the successful formation of the Okuma cabinet, the Press was chiefly responsible, the former by offering opposition and the latter by extending support. The gagging of the Press with regard to the rice riots and the vehement opposition which it aroused led to the downfall of the Terauchi cabinet. The power wielded by the Press in guiding public opinion is, therefore, more potent in Japan than is generally thought by the foreign students of Japanese journalism.

Western Books in Customs Returns

The import of foreign books did not exceed ¥500,000 a year in the pre-war times, but grew to ¥1,884,000 in 1921 and ¥4,458,000 in 1924, about 80 per cent. of the total value passing through the port of Yokohama. Classified according to countries Germany heads the list with ¥1,368,000 in 1924, followed by the U.S.A. ¥1,370,000 and England ¥1,258,000 as against the pre-war figures (1913) of ¥132,000, ¥81,000 and ¥256,000 respectively. In 1918 England contributed 65% and the U. S. A. 32% while German books were practically nil. The figures in recent years are shown below (in ¥1,000):—

	1913	1921	1924
England	256	615	1,258
U. S. A.	81	570	1,370
Germany	132	493	1,368
France	11	73	234
Total including others..	497	1,884	4,459

Publishers' Crazy Activity in 1927

The publication of collected works by subscription in cheap form, "one-yen-book," was an outstanding feature in Japan's publishing community in 1927. The enterprise was started by the Kaizosha, with "Contemporary Japanese Literature", followed in rapid succession by the "World Literature" series by the Shinchosha, the "World's Great Thought" series by the Shunjusha, the "Popular Literature" by the Heibonsha, the "World's Dramatic Works" by the Kindaisha,

the "Modern Plays" by the Dai-ichi Shobo and so on. The two first named series have secured 300,000 and 400,000 subscribers respectively. A translator of "Les Miserables" included in the "World Literature" series is said to have pocketed the royalty of over ¥100,000. The activity of this popular enterprise has affected seriously other publication business, especially periodicals which are relatively more costly than the collection books. The result is that not a few magazines have ceased to appear, while those that are kept up have seen their circulation fall by 20 to 50%.

CHAPTER XVII

MODERN LITERATURE

VANISHING YEDO LITERATURE AND THE DAWN OF MEIJI LITERATURE (1868-1885)

For about twenty years after the establishment of the rehabilitated Imperial regime, in 1868, the literature of Japan, like other institutions of native origin, was submerged in the huge social and political convulsion that swept over the country after it was thrown open to intercourse with Western nations. Both the Government and people were intent on reconstructing Japan on the Western model and had no time to attend to the cultural aspect of life. There was only the decadent literature of the Yedo period founded, as regards fiction, on the cramped and didactic school of Bakin (1766-'48), Kyoden (1760-'16) and others whose stories invariably bore the stamp of moral purposes.

The first sign of the revived activity of literature was seen in the appearance of politico-social romances by young political aspirants of the day who were denied freedom of speech. Yano Ryukei's "Keikoku Bidan" (Rise of Thebes), in 1883, Suehiro Tetchō's "Setchu-bai" (Plum Tree amidst the Snow) in '86, and Shiba Tokai-Sanshi's "Kajin-no-kigu" (Chance Meeting of the Fair and Brave) in '85 may be mentioned. These effusions were devoid of any literary merit, but as a sign of the times they were sufficiently significant, for in the years prior to and after the Satsuma rebellion of 1878 Japan was full of ardent advocates of the French school of liberty and equality who clamored for the establishment of a constitutional regime.

These extremists found in the political novels of English, French and Russian writers something so absorbing both in general interest and basic ideas, and so different from what they were used to in native literature, that they hastened to publish adapted translations to fan the agitation for freedom. It was about that period also that the translation of European novels, mostly English, such as the works of Lord Lytton, Disraeli, and Walter Scott, and also Dumas appeared in succession and enabled the Japanese people to get a peep into the technique of Western fiction-writing. Both those political novels and translated works were crude productions judged by modern standards, but evidently they had their use in those early days of the Meiji era. They prepared the ground for the growth and rise of Meiji literature.

Transition Period—the "Primitives", living and dead.

For convenience of treatment the rise of modern imaginative literature in Japan may be divided into two stages, one dating from the appearance in 1885 of a short treatise by Dr. Y. Tsubouchi entitled "Essentials of Fiction-writing" in which he boldly denounced the conventional method of the old school

and strongly insisted that novels, as an interpretation of life, must depict not what should be, but what is. This earlier stage may be considered to extend from 1885 to about the close of the Russo-Japanese war (1904-5), and the other to cover the subsequent period including the terrible World's war.

Those who played a prominent part in the earlier half may not inaptly be called "Primitives" as they helped to guide and give shape to our fiction-writing in that transition period. The place of honor on the thinning roll goes by general consent to Prof. Dr. Tsubouchi, of Waseda University, whose treatise, though of no great importance as seen today, was a death-knell to the virtue-rewarding and evil-punishing canon of the old conventional writers.

Dr. Tsubouchi. The venerable Nestor of modern Japanese literature, who, as a devoted Shakespearian scholar, has translated almost all the dramatic works of the immortal bard, himself wrote at first some stories to exemplify the realistic ideas laid down by him. These are "Shosei-katagi" (Student Life), "Imotoze Kagami" (A Married Couple) 1885-6, "Saikun" (Wife) 1888, etc. He has subsequently given up fiction in order, as described later on, to devote himself to drama in which his "Kamakura trio", i.e. the "Makino-Kata" (1897), "Yoshitoki no Salgo" (The Last Hour of Yoshitoki) (1917) and "Nagori no Hoshizukiyo" (1918), and also "Urashima" (1905), will remain classical.

Futabatei Shimei (1866-07). Dr. Tsubouchi found in him a powerful ally in the new movement. His "Ukigumo" (Fleeting Cloud) furnished with even greater effect a practical demonstration of the theory advanced by the Doctor, for Futabatei as a novelist was frankly recognized by his master as his superior. He was a Russian scholar and an admirer of Turgeneff and other Russian masters, several of whose works he translated into Japanese. The contrast between Futabatei and the Doctor is highly interesting, the former tinged deep by Russian literature and the latter a staunch admirer of English writers. Futabatei's last two novels, "Heibon" (Commonplace) and "Sono-omokage," ("An Adopted Husband" in English by Mr. B. Mitsui), are regarded as masterpieces of this author.

Under the influence of two writers of such opposite tendency there grew up gradually a new literature of Meiji, in which two main currents made their mark, though both started from aesthetic realism.

Ozaki Koyo (1867-04). One was the art-for-art's sake school represented by Koyo and the other the idealist led by Koda Roban (1867-). Koyo organized a literary club known as Genyusha with his friends Kawakami-Bizan (1870-08), Yamada-Bimyosai (1868-09), Hirotsu-Ryuro (1861-), Izumi-Kyoka (1873-), Iwaya-Sazanami (1870-), etc. Of these brother craftsmen Kyoka stands prominent as a writer on weird subjects while Ryuro is strong in drawing the tragic side of life. The latter's "Imado-shinju" (Double Suicide at Imado), "Kawachiya" (House of Ill-fame), etc. were much talked about at the time.

Koyo will long remain as a stylist and finished writer and though his fame was at first established as a writer of short stories, it rests on his "Konjiki Yasha" (Golden She-devil), left unfinished in 1897. It depicts the tragic struggle between a

young hero and his unfaithful sweetheart, a usurer's daughter. It has been dramatised and also exists in an English translation.

Koda Roban was the foremost rival of Koyo and he belonged to an aesthetic idealist school with a coloring of Buddhistic and philosophic sentiment. If Koyo is feminine in tendency both in subject and delineation, Roban is masculine, typical examples of his work being "Furyu-butsu," "Ikkoken," and "Goju-no-to" (Pagoda), which has been translated into English. Roban wrote two novels in '19 and the historic romance "Taira-no-Masakado" in '20. They are by no means unworthy of their author, but evidently the taste of the reading public had changed, for they were not so warmly received. Roban has long ceased to produce literary works except for occasional essays on history. He once occupied a chair of Literature in the Kyoto Imperial University.

Translation.—The translation of European fiction, formerly attempted by amateurs though with some notable exceptions, and with no serious meaning as literary productions, now began to draw the serious attention of regular men of letters. Kuroiwa Rulko (1863-1917), who first tried his hand in the translation of English detective stories, made his name as a translator of consummate ability, and then there were Morita Shiken (d. 1907), who generally dealt with Hugo's works, Uchida Roan (1860-), translator of Dostolevsky, Mrs. Iwamoto Kashiko better known by her pen-name Wakamatsu Shizuko (d. 1902) who gave us Mrs. Burnett's "Little Lord Fauntleroy," and some others.

Mori Ogai (1860-'22), retired Surgeon-Gen. and a German scholar, will long remain in the history of Japanese literature as pioneer in the introduction of continental, especially German, French and Italian, literature. His first story, "the Dancing Girl," a story of love between a German woman and a Japanese, is still acknowledged as a literary gem, but it was as a translator of Goethe, Ibsen, Hans Andersen, etc. that he contributed most to the literature of Japan. His style bears the mark of high polish tempered with his intimate knowledge of foreign writing. In later years he tried his trained hand in historical romances and produced "Oshio Heihachiro" in 1914, "Kanzan-Jittoku" and "Takasebune" (River Craft) in '16 and his last work, more an authentic biography than a romance, the Life of Izawa Ranken, a pioneer Dutch scholar and physician, in '20.

Lady Novelists.—What specially characterized this transition period was the appearance of novels by lady authors, among whom may be mentioned Wakamatsu Shizu-ko, Koganei Kimiko, Miyake Kaho (wife of Dr. Miyake, a renowned scholar and essayist). But the greatest of all was Higuchi Ichiyo.

Higuchi Ichiyo (1872-96). Her career as an author lasted only four years, but in this short period she wrote over 20 short stories and two novels; "Nigorie" and "Takekurabe," her masterpieces. A keen observer of life and a writer with warm, tender heart, her writing is permeated with a certain pathos felt in sympathy with poor downtrodden women. Though somewhat marred by conventionalism, her style is very graceful and charming, and altogether her name will forever remain in the history of Japanese literature.

Domestic Novels.—The period saw toward its close an immense vogue for domestic novels, as if to fill the gap occasioned by the premature death of Koyo and Futabatei, the retirement

of Roban from the field of fiction, and by the early exhaustion of those younger authors who tried their hands at treating social phases of life.

Tokutomi Roka (1868-1927). Among the writers of works of this sentimental school the first to be mentioned is Tokutomi Roka whose "*Hototogisu*" (1900), or "*Namiko*" in the English translation, his first novel, was the best seller of the day, being well adapted to the simple taste of housewives and school girls. It is based on a real pathetic story of a betrothed girl dying of a broken heart after being disowned by her future mother-in-law as tainted with consumption. Roka is believed to be a socialist by conviction and an ardent follower of Tolstoy whom he visited in person in 1906 at Yasuyana Pollana in course of his pilgrimage to Jerusalem and revisited the historic village (1919-20) with his wife, as narrated in "*From Japan to Japan*" issued as a joint work. He has written quite a number of books, stories pure or partly autobiographical, and collections of sketches and meditations, all of which have won a wide vogue for chaste style and clean imagery. As if to follow his great Russian master to the letter he withdrew to Kasuya, a village some eight miles west of Tokyo, and lived a semi-hermit life there. Roka's writing reveals within a safe limit an underlying socialistic ground.

Rise of Naturalism

Japan's success in the second foreign war, with Russia, in 1904-5 awoke in the minds of younger men of letters a sharp craving for a new meaning of life and growing repugnance to conventional morality. In their rebellious mood against the accepted canons they now turned to continental authors, the school of Turgeniev and Tolstoy, Zola and Maupassant, D'Annunzio, Ibsen, Hauptmann and other naturalists, as sources of their inspiration. They found these European masters simply irresistible in the magic pen they wielded in boldly depicting life as it exists. In the eyes of our young authors the curtain that formerly separated art from life was for the first time lifted by their new masters. They fondly believed that art thus acquired a real significance.

This new school produced several apt exponents, such as Tayama Katal (1871), Shimazaki Toson (1872), Tokuda Shusei (1871-), and Kunikida Doppo (1871-'8), and Masamune Hakucho (1879-) and a host of lesser luminaries.

Doppo.—As a Naturalist Doppo's fame has outlived his premature death, and a collection of his short stories still enjoys wide popularity for the powerful and naturalistic depiction of contemporary life. Some of them have been translated into English and Russian. A great admirer of Wordsworth his stories are healthy in tone. Of the three living elder naturalists, perhaps Toson is distinguished from the other two as being least sensual in style and sentimental in the pictures drawn, for he is at once a novelist and poet. Katal, who is a voluminous writer, is most fleshly, and one of his later productions invited the censor's suppression as being prejudicial to public morality. Shusei loves to depict the gloomy side of life, so that most of his works are comfortless and oppressive. Hakucho is tinged by nihilistic ideas and is now dividing his efforts between fiction and drama.

Meanwhile the public had grown tired of the objective, self-centred and very often superficial and bestial picture of life depicted by the votaries of the naturalistic school, who on their part had been already awakened to the sense of their exhaustion and had to yield the dominant position to writers of different faiths. Of these Natsume Soseki and his school first claim notice.

Natsume Soseki and his school (1867-1916).—A pupil of Lafcadio Hearn and later a professor of English Literature at the Tokyo Imperial University it was as late as 1905 that he first attempted fiction in "I am a Cat". His motif was naturally placed on a higher level than the "direct action" principle of the Naturalists. His first work is characteristic, it being a calm domestic observation from the household pet's point of view, much as Riki was accustomed to sit in judgment on Anatole France's amiable M. Bergeret. Natsume and the younger writers who rallied around him are therefore classed under the title of "School of Sanity and Culture." Irony, humor, and power of psychological analysis characterized his works which are also rich in background made up of wide knowledge, profound learning, and mature observation. His style, classically correct, is graceful and subtle, though lapsing into tediousness at times. The "Botchan," the "Higan-sugi-made," the "Sanshiro," and the "Mei-an" unfinished, are his representative works. He has also written sketches.

Soseki had followers, as may be expected, among university graduates and others of similar extraction, so that they are also called academic writers. Of these three names stand out prominent, i.e. Kikuchi-Kan (1889-), Kume-Masao (1891-), and Akutagawa-Ryunosuke (1892-1927). The suicide of the last in July '27 by taking drugs startled not only the literary circles but general public, for he was still so young, was reputed as a successful writer of wide popularity. He had been complaining of nervous debility for some years, and it is believed that he had become weary of life. He had left his farewell letter to one of his friends, and it reads like a perfectly sane writing.

School of Sanity and Culture.—This is identified with a group of young graduates of the Imperial Universities and their friends and guided by the above trio. Kikuchi is equally celebrated as a critic, dramatist, and novelist, and one of the few living authors whose works are eagerly sought after by publishers. In his two latter capacities he skilfully seizes upon or creates out of ordinary materials a psychological point that touches the human chord in the minds of his readers and sets it vibrating.

Among his dramas and stories may be mentioned the *Tadanao-kyo Gyojoki* (Life of Lord Tada-nao), '18, the "Tojuro-no-ko" (Love of Tojuro), '19, and the "Onshu-no-Kanatani", '19, which last has been translated into English by Prof. K. Ando under the title of "The Serene Realm beyond the Passions." Mr. Glen Shaw, an English Professor at Osaka, has also translated the Love of Tojuro and two others, and interesting to say Kikuchi's dramas in the English version has been honored with a highly appreciative remark in the *Morning Post*, London.

Kume Masao is a sentimentalist and a gifted and many-sided writer, a dramatist, a novelist, and a critic, but has lately taken

to writing popular tales. "Hotarugusa," 1918, is a love story believed to be autobiographical, and there are also "Tejina-shi" (Juggler) '16, "Shinju Gojitsudan" (Memory of a Double Suicide), '17, and "Ryoyu Akuyu" (Good Friends and Bad), '18. His works are much in demand among publishers.

The Later Half Period

Apart from the pronounced cosmopolitan and socialistic feature which the World's war has imparted to Japanese thought and literature, in common to those of other countries, there is nothing specially marked to distinguish the earlier half from the other. The two have common "isms", only in the latter they are drawn in stronger color. The division is arbitrary and comes chiefly from consideration of the balance of space.

The advent of the reign of Taisho in 1912 saw the Naturalists thrown into the shade by younger writers who rebelled against the sordid depiction carried to fulsome excess by Katai and Shusei and their younger imitators. Some of these rebels aimed at a humanitarian view of life, others idealistic interpretation as inspired by Tolstoy, while still others were grouped as the "Art-for-art's sake" coterie. Of course this division is by no means clearly drawn, for very often the so-called humanitarians are found shading off into idealists, and so on. It is interesting to note that the permeation by Tolstoyism of the realm of thought and letters of Japan almost coincided with the outbreak of the World's war.

Humanitarians

There are grouped under this head several authors called the "Shirakaba" (White Birch) coterie from the title of their literary organ, prominent figures among them being the late Arishima-Takeo (1878-1923), his two brothers Arishima-Ikuma (1882-) and Satomi-Ton (1887-), Shiga-Naoya (1883-), Mushakoji-Saneatsu (1895-), and a host of minor writers.

Arishima Ikuma works in a wider field than most of his contemporaries, for he is at once a painter and novelist, having studied painting at Paris and Rome after he was graduated from the Government Foreign Language School. Perhaps he is better known in the former capacity.

Satomi Ton surpasses his two elder brothers, Arishima Ikuma and late A. Takeo, as a novelist and playwright. In respect of versatility of style and talent of turning every day occurrences into a good story he has few equals.

Shiga Naoya is the most pronounced humanitarian and also a strict moralist. He is a very spare user of words and his writing is marked by clear-cut style besides being original both in conception and treatment. His works are admitted by his brother craftsmen as bearing comparison with the best of Tchekov and Maupassant.

Mushakoji Sane-atsu, born of a noble family, is an out-and-out Tolstoyan and has retired with several of his friends to a secluded corner in Kyushu to act up to the ideal life taught by their Russian master. He lacks system and seasoned thought

but this is compensated for by his warm sentiment of love. He is also known as a dramatist.

There is also a group of writers who are generally separated from the Humanitarians on account of their idealism different in aim and complexion. Mushakoji-Saneatsu mentioned before is of the Tolstoyan utopia and Shiga-Naoya and Satomi-Ton are writers of fame who are associated with Mushakoji.

Among idealists of the opposite school to the Tolstoyists are found two or three writers who rank high, viz., Tanizaki-Jun-ichiro (1886-) and Nagai-Kafu (1879). The former is believed to be richer in imagination and higher in style, something like a mixture of De Quincey and Edgar Allan Poe. His versatility and power are shown both in his fiction and drama. He is fond of writing of satanism, sensationalism and sex perversion.

Nagai Kafu (1879-) is a hedonist of established reputation. He himself says that he means to depict the story of a pleasure-seeker whom his surroundings compel to enter a life of resignation and acquiescence. His hedonism stands out in bold relief in his "Reisho" (Sneer), a satire of the Japanese society of the day. The "Stories about America" and the "Stories about France" are reminiscences of his sojourn abroad. His voluptuous style is well qualified for describing love scenes heightened by the glamor of town life.

An author of an entirely different stamp and future promise is Sato Haruo (1892-) who by an exquisite fancy and dreamy interpretation of life with the style characteristic of him has forced himself into public recognition. He has lately turned to Chinese literature to supply him with hints and materials.

The World's War and After

The close of the World's war has been followed also in Japan by general awakening to the problem of social reconstruction and especially elevation of the laboring classes. Though still existing only as an ominous undercurrent, the agitation has profoundly affected the trend of thought in general and the tone of literature in particular. Novelists, dramatists and critics drawing their inspiration from Russian socialists and Marxian communists have grown in number. A sign of the times is supplied by the appearance in 1924 of the "Bungei Sensen" (La Frontol) as an organ of a group of rising writers, calling themselves "Proletarians". They find themselves confronted by a rival coterie known as "Bourgeoisists" with their organ "Bungel" (Arts & Crafts). The two are equally dissatisfied with the "existing order in the realm of letters," but there they part company, the Proletarians aiming at as their ultimate goal the destruction of class discrimination while the Bourgeoisists aspire to seek a new meaning of life. The Proletarians have as their fellow idealists several writers of established fame, i.e. Roka Tokutomi, Mimei Ogawa, Toyohiko Kagawa and some others; all individual men of letters with socialistic leaning, but as a school they are still insignificant, and come far below their rivals in public esteem. Kagawa sprang into fame in 1919 by his first work, "Shisen-wo-koete" ("Before Dawn" in the English version), followed by two others, all of which have had immense popularity at the time. They are a personal record of a sincere socialist

and philanthropist helping the poor and have no claim to plot and dramatic situation. The works were written, it is believed, not particularly to give relief to his literary craving but chiefly to gain funds to conduct his work of charity. Whether the works will survive remains to be seen.

After all, despite the loud clamoring of the Proletarians and their rivals, both equally immature, those elder writers who have won public recognition as Naturalists, Idealists, or votaries of Sanity and Culture still dominate the world of fiction and will not be easily dislodged from their entrenched position. Toson Shimazaki, Katal Tayama and Shusei Tokuda, among pioneer Naturalists, the trio of the Culture school and others of equal renown are all welcome in the columns of the best-paying periodicals. Among the works that appeared in 1924 Shimazaki's "Three People" and Haruo Sato's "The Traveller" were accorded the place of honor as the two best novels of the year.

DRAMA

The origin of the classical drama of Japan is to be sought in the texts of the lyric music for puppet-plays written by Monzaemon Chikamatsu (1650-1714), Izumo Takeda (1693-1757) and several others who flourished in the Osaka-Kyoto districts in the 17th-18th centuries, the home of the puppet-plays, even to-day. The marionette performances, it should be noted, are still popular among lovers of a special lyric music known as *gidayu* and those who appreciate and study posture-dancing.

The "kabuki" is a hybrid between the "No" play that was brought to high perfection in the Ashikaga period (1336-1573), the sacred dance and the vulgarized folk dance. In time, especially in the Tokugawa period, it completely threw into the shade the stiff though refined "No" play. The name of Mokuami Kawatake (1816-1893) will forever remain on the pages of the history of Japanese drama as the last ornament of the Augustan era of Tokugawa. (Vide Chap. Amusements, Ed. J.Y.B.)

Modern Development

As in the case of modern fiction Dr. Tsubouchi started the movement that has led to the modernization of Japanese drama, not only by writing himself a number of plays, most of which have become household words, but by establishing a special dramatic society for giving training to a new school of actors. When he found that the cause was safe in the hands of his pupils and followers, his fertile brain began diverting itself in minor dramatic exhibitions as children's plays, open air performances, pageants, etc. One of his plays, "The Hermit", has been translated into French.

Dr. Tsubouchi found in the late Surgeon-Gen. Dr. Ogai Mori a collaborator as enthusiastic as himself in promoting the development of modern drama, the Surgeon-Gen. chiefly confining his efforts to the introduction of modern European drama, as the works of Ibsen, Strindberg, Hauptmann, Maeterlinck, Shaw and D'Annunzio.

Younger Dramatists and Later Situation.—With the classical drama brought to such mature perfection in acting, setting, etc.

and so deeply rooted in the public taste, modern playwrights did not dare at first to advance off the beaten path trodden by the old masters. Almost all the well-received plays by modern authors are therefore modelled on the traditional pattern and reluctantly include chorus and lyric interlude, as witness such often-staged plays as "Kojo-no-rakugetsu" (Fall of Toyotomi) by Dr. Tsubouchi, "Lord Tadanao and Onshu-no-kanata" (Revenge Disillusioned) by Kan Kikuchi, "The Warrior Sakasaki Dewa" by Mr. Yuzo Yamamoto and some others. The fact is that the great theatres in Tokyo and Osaka still shut their door to the new plays, and only admit them now and then as a sort of diversion, while, on the other hand, the actors of the classic school are too conscious of the fascinating power they still exercise over the minds of both intellectual and common classes with their consummate rendering and exquisite posture-dancing that they are not to be easily persuaded to try their skill on new plays.

Modern plays, however, are far more appreciated by newspapers and periodicals. Literary magazines that formerly looked askance at productions of the modern playwrights have lately begun to open their columns to them equally as to novels. The two are now treated on an entirely equal basis. One thing that is noted with Japanese plays, as distinguished from those in the West, is that in Japan new works are first printed and transferred to the stage only after they have passed the examination of the critics. The order is quite the reverse to that obtaining in Europe and America.

Among the playwrights who have followed in the wake of the two venerable pioneers are first Shoyo Matsui (1870-) who has won wide popularity as an introducer of foreign dramas and also as author of several original plays well adapted to show to advantage the individual strength of the living actors of note, the author being well versed in stagecraft. Some of his most successful pieces are "Hideyoshi and Yodogimi", "Yodogimi and Mitsunari", both historical, and the "Bando Musha" (Bando Warriors), all three being comedies of no small merit.

Kido Okamoto (1872-) is one of the most fertile and versatile dramatists of the day, and aided by his consummate knowledge of stagecraft, has turned out plays cleverly woven out of old familiar stories, such as "Onoye Itahachi", "Ogurusu Chobel", "A Tale of Shuzenji", "Double Suicide at Minowa". They are of the melodramatic type and interlaced by lyrical music as in the classical drama. He has also written socialistic plays for actors of the "New School", some of these being "My Home", "After the Battle", and "the Classes".

Kichizo Nakamura (1877-) perhaps stands foremost as a playwright of socialistic tinge. A graduate of Waseda who studied further at Princeton and Columbia; the very fact that he severed connection with the "Art Society" founded by Dr. Tsubouchi, his master, and set up with the late Sumako Matsui, a star actress of the modern school, and the late Hogetsu Shimamura (1867-'18), her lover, illustrates his restless mentality, and that he is impatient of the established order of things. All his well-known plays, such as "The Razor", "Bread", "The Bomb", etc. are strongly lined with socialistic coloring. His hero is invariably a socialist of strong will bitterly attacking social evils

and clamoring for social reconstruction. The "Razor" has been included in "Three Modern Japanese Plays" published in America.

Kaoru Osanai (1881-), one of the co-founders of "The Free Theatre" with Sadanji Ichikawa established in Tokyo in 1913 and next that of the Little Tsukiji Theatre opened in 1914 in Tokyo by a group of actors and writers, is a talented playwright with university education. An earnest dramatic reformer both as regards play and acting, he has contributed much to the progress of Japanese drama by original writing and translation of foreign drama. His delicacy and ingenuity in treatment reminds one of Granville Barker. "The First World", "Yosaburo" and "The Son" are characteristic works.

Yuzo Yamamoto (1887-) is a graduate of the College of German Literature of the Tokyo Imp. University; his strength lies in depicting contemporary life, in realistic style with skilled psychological representation of his characters. He is best known by "The Crown of Life", "Prof. Tsumura", "The Mother", "The Illness of a Maid", all based upon his social and psychological study.

Masao Kume (1891-) is another Tokyo Imp. University graduate, from the English Literature school, who has risen to prominence both as novelist and dramatist. His most popular plays are "The Double Suicide at Abukuma", "Miura Spinning Mill", "The Origin of the Jizokyo", etc. These depict in his characteristic elegant style the working of the bright side of Japanese mentality.

Hyakuzo Kurata (1891-) stands apart from others with his Buddhistic interpretation of life as flavored by Oriental morality and ideas. His first success was "The Buddhist Priest and his Disciples" and the next best is "Shunkan," an ill-fated exile of the 12th century. The latter has been translated into English.

Other playwrights of equal repute are Kan Kikuchi, Saneatsu Mushakoji, Jun-ichiro Tanizaki, Ujaku Akita (1883-), Seika Mayama (1878-).

One thing that is significant of the progress of Japanese drama recently has been the recognition by theatre managers of authors' rights over the acting of their plays on the stage.

CHAPTER XVIII

ARTS AND CRAFTS

INTRODUCTORY REMARKS

In his "Dai Nippon Bijutsushi" (History of Japanese Art, pub. 1922), Mr. Hoshin Kuroda, a well-known historian and critic of art, enumerates five fundamental characteristics of Japanese art as distinguished from the Occidental, i.e. (1) Vegetable in nature as contrasted with the mineral, (2) Naturalistic as against human, (3) Idealistic as against realistic, (4) Symbolic as against individualistic, and (5) Decorative as against utilitarian.

(1) **Vegetable:**—The Vegetable nature of Japanese art is most pronounced in architecture and next in sculpture, and explains why grace, delicacy and simplicity are features of Japanese productions in these particular fields.

(2) **Naturalistic:**—The fact that the Oriental art, Chinese and Japanese, is rich in landscape, birds, flowers, and other natural objects, and is poor in portraits demonstrates how widely the two arts are separated in motif from that of the Occident.

(3) **Idealistic:**—In treating natural objects Japanese artists do not care much to represent them as they are, but rather try to depict them as they should be. Their method is idealistic and imaginative. They lay greater importance on the nature of lines and regard perspective or light and shade as secondary.

(4) **Symbolic:**—Idealistic treatment naturally results in symbolic and conventional representation as distinguished from the individualistic. This explains why Japanese pictures, landscapes, for instance, bear a family likeness whether drawn by masters of the Yamato-ye, Southern Chinese or Maruyama schools. The absence of individual peculiarity is especially marked in Buddhist images which are all modelled on conventional patterns.

(5) **Decorative:**—The flowers and birds drawn by Korin and his followers are remarkable specimens of the wonderful development of Japanese art in decorative effect at the expense of the utilitarian side. A fine pagoda standing in temple ground supplies another significant example, for it is nothing more than a fantastic development of the stupa that even now marks a burial mound.

THE PERIOD OF MEIJI (1868-1912) & AFTER

1. TRANSITION PERIOD TILL 1882

In all other periods transition from one to the other proceeded by gradual steps with an intermediate stage spanning the two, but in the case of Meiji period the change was so sudden

and abrupt, especially as regards art, that it seemed as if there was no connecting link between it and its predecessor. Even in the troubled days of the tottering Tokugawa government the traditional canons of art at least commanded some measures of respect, but with the termination of the seclusion policy they were thrown into utter confusion in consequence of the introduction of the entirely different system of Occidental art. Their aristocratic patrons gone all at once and the people smitten with a craze for anything of Western origin, our artists and artisans were at a loss how to adjust themselves to the new surroundings.

The age of chaos followed and lasted till about 1882. It was at that time that Kano Hogai (d. 1888), one of the greatest painters of modern Japan, accepted with something like gratitude the offer by a certain appreciative foreign connoisseur to hire him at a monthly allowance of yen 20, and that his equally famous brother painter, Hashimoto Gaho (d. 1908), had to eke out an existence as a petty draughtsman in the Admiralty. Painters of Kyoto were not much better off, for they had to work hard for bare existence as humble designers of patterns for dyed silks.

Master sculptors, chisellers and others were overtaken by a similar turn of fortune, for in the eyes of the people now dazzled by the material prosperity of the West and blindly intent on introducing it, objects of art by native master craftsmen were no longer of value. And these objects were literally thrown on the market by ruined samurai who lost all the amortized bonds they had got in lieu of their hereditary feudal pensions in trade and other novel ventures for which they were entirely unqualified. No wonder that in those vandalistic days many a costly gold lacquered work of exquisite workmanship suffered demolition merely to get the gold dust, and the old brocade mounting of kakemono was ruthlessly detached from the masterly pictures and burned to get the gold used in the gold threads. Tens of thousands of "koto" were cut up to get the well-polished paulownia for making braziers.

2. PERIOD OF REACTION—from c. 1882 to c. 1896.

Fortunately a reaction was soon to set in to arrest this blind movement hurrying toward vandalism and folly. The warning voice came from outside. The favorable reception which the Japanese picture enjoyed at the Vienna World's Fair was a surprise alike to the Government and exhibitors. This, however, was not enough to rouse our people from their pernicious delusion. So infatuated were they with things Occidental that, while leaving the native art in utter neglect, they hastened to establish in 1876 the Fine Art Department at the Gov. Engineering Coll., engaging three Italian artists for the three courses of painting, carving and mechanical and decorative drawing. For all the care bestowed upon it, it failed to make healthy growth; it failed to enlist the required number of students, while those who studied there rebelled against their teachers. Meanwhile the ardent plea made by the late Mr. E. F. Fenollosa (who came to Japan in 1879 as Prof. of philosophy at the Imperial University), Dr. Wagner (Prof. of the University) Sig. Chiosonne (Italian sculptor engaged by the Gov. Printing Bureau), and Mr. Bigelow

(Secretary of the American Legation) in favor of Japanese art slowly began to open the eyes of the authorities. It was at the instance of these foreign connoisseurs that a special art society for study was formed, and that it was afterward expanded as the present Japan Fine Art Society. The Government now began to perceive the necessity of carrying out thorough change in the policy of art education, and it was time that they should. The upshot was that the Art Department was closed in 1883, and two years later the First Picture Exhibition was held as a means of reviving the native art of painting. This show was repeated after the lapse of another two years. The movement was carried further and a fine art school on purely native line was established in 1889. The Imperial Court also took interest in the revival movement, appointed a national treasure investigation committee in 1889 and created in the following year the honorable post of art commissioner, appointing to it a number of master painters, the post being subsequently thrown open to artists of other classes. Thus at last began to dawn the light of renaissance, as it is believed, upon the benighted field of Japanese art.

The subsequent period down to the present day of the Showa era beginning with 1926 may be subdivided into three stages. In the first ending about the time of the Russo-Japanese war (1904-5), though marked as before with imitation of Western art, our artists were more discriminative and better able to appreciate its spirit and to care less for its form. They had acquired sufficient attainment to undertake foreign-style works with their own hands. In the second stage their self-confidence further bid them to be more eclectic in adapting Western style to Japanese conditions, and at the same time they were eagerly on the lookout to introduce novel movements from Europe and America.

In the last extending to the present day the reform movement is taking definite form and the amorphous condition has begun to settle down.

Architecture

A decline of religious architecture on one hand and the rise of public structures are a dominant feature in the new period. Till about 1883 most of the Government offices, schools, etc., built in Western style were undertaken by either foreign engineers or architects. These buildings, to mention some of them, were the former Shimbashi Station (1871), British Embassy (1872), German Embassy (1877), General Staff (1879), Foreign Office (1879), Prince Arisugawa's mansion (1882), most of them in Renaissance or Gothic style.

From the 2nd period works undertaken by Japanese architects who studied either at home or abroad began to predominate over those by foreign experts. In Tokyo the former erected 16 as against five by the others. Of the 16 the main buildings of the College of Science, Tokyo Imp. Univ., by Dr. H. Yamaguchi (1885), the Department of Agriculture and Commerce by Dr. Shinya (1889), the Bank of Japan by Dr. Tatsuno (1895) may be mentioned. Of the foreign architects, the late Dr. Conder is best known. The Nicolai Church (1891) was built by a Russian; the Admiralty (1894), by Dr. Conder. The erection of native-style buildings, viz., the Nara Prefectural Office (1895) by Dr. Nagano, the Daikyokuden Hall, Kyoto, by Messrs. Kiko and

Ito (1895), and the Amida Hall, East Hongan-ji, Kyoto (1895) may be taken as a sign of the growing revival of native art, for it should be added, a chair for it was first created in the Imp. University in 1880. From about 1897 on, by which time graduates from the course of Architecture of the Imp. Engineering College had numbered over forty, almost all the important foreign style buildings were the work of our architects who had acquired sufficient self-confidence from experience and study. A list is given below:—Tokyo Chamber of Commerce by the late Dr. Tsumagi (in 1899); the Mitsui Bank, Dr. Yokogawa (in 1902); the Yokohama Specie Bank, Dr. Tsumagi (1904); Akasaka Palace, the late Dr. Katayama (1907); Communication Department, Messrs. Yoshii and Ushida (1909); Imperial Theatre, Dr. Yokogawa (in 1911); Manselbashi Station, Dr. Tatsuno (1912); Tokyo Central Station, Dr. Tatsuno (1914); Kogyo Club, Dr. Yokogawa (1920); Meiji Shrine, Prof. Dr. C. Ito (1920); Mitsukoshi Department Store, Dr. Yokogawa (1921).

The Meiji Shrine is an interesting structure for this later time, it being in a "nagare-tsukuri" style of the Heian period, or about one thousand years ago, and a strictly wooden Shinto construction as adapted to modern requirements. About ten Shinto or Buddhist structures have been designed by the same Professor and others in various parts of the Empire.

The practice has lately appeared of engaging foreign, mostly American, experts of the so-called Fuller style, to erect big piles in a comparatively short time, but it may be said that on the whole Japan is steadily emerging from the imitation stage as regards the construction of European style buildings. These foreign-designed edifices were seriously damaged in the earthquake of Sept. 1, 1923. Many massive buildings in the downtown of Tokyo were gutted or otherwise rendered useless by fire and shock on the same occasion.

Sculpture

This is relatively the most backward of the three forms of art reviewed here. The course of sculpture established in 1876 in the Fine Art Department of the Gov. Engineering College by engaging an Italian sculptor, Sig. Ragusa, was shut in 1882 from lack of students, but in 1889, with the creation of the present Fine Art Academy, the course, this time native carving, was revived, and to this the Western style was added not many years after. It was not from want of sculptors of merit that the art failed to make any mark, for in Profs. Kano Natsuo (1827-98) Kagawa Katsuhiko, Unno Shomin, all of the Tokyo Art Academy, Japan has glyptic artists of no mean power, but it was because public patronage, with the decline of Buddhism with no new demand appearing to take its place, was not yet sufficient to encourage its growth. Profs. K. Takeuchi and K. Takamura, originally Buddhist carvers, taught wood-carving in the Art Academy. Of Ragusa's pupils only two, B. Fujita and U. Okuma, have attained to some renown.

Metal-carving as an applied art soon recovered its activity in a new direction, for in the production of vases and other hall decorations the glyptic artists found wider field of employment than making sword-decorations, as described below in some detail.

From the 3rd period dating from 1904 the development attained by our sculptors has been rather striking, especially since the opening of the Government art exhibition in 1907, and we have now a pretty large number of men who occupy front rank in this art. These are Asakura Fumio, Takebatake Taimu, Kitamura Shikai, Ogihara Morie, Fujii Koyu, Hiragushi Denchu. Profs. Takamura and Shinkai who are their seniors were elected members of the Imperial Art Academy organized in 1919, and are therefore Nestors in this field. It may be remarked that the custom of erecting bronze statues of illustrious persons has made its appearance, but as works of art none of them have achieved any great success.

Painting

So far as the schools of painting existing in the pre-Restoration period are concerned, there are not wanting more or less representative painters who survived the dark days following the great political and social upheaval occasioned by the abolition of feudalism. For the Tosa school we had Kawasaki Chitora and Kawanabe Mitate, and their pupils Kobori Tomone and Murata Tanryo. The latest addition is Matsuoka Eikeyu who is trying to revive the Yamatoye-style.

The Kano school was well represented by Kano Hogai and Hashimoto Gahō, pupils of the Kobikicho Branch of the Kano hierarchy that dictated the painting world in Tokugawa days, and by such prominent pupils of Gahō as Terazaki Kogyo, Shimomura Kanzan, Hishida Shunso, etc. Kogyo and his brother-pupils, however have developed, under the influence of European painting, new features distinct from the traditional style.

The Maruyama school had Nakajima Raisho, pupil of Ozui, son of Okyo; Kawabata Gyokusho who studied under Raisho; Suzuki Hyakunen under Onishi Chinnen; Suzuki Shonen and Imao Keinen under Hyakunen.

The Shijo school was represented by Shiokawa Bunrin, pupil of Okamura Toyohiko; Shioba Bumpo, Kono Bairai and Nomura Bunkyo, pupils of Bunrin; Kikuchi Hobun, Takeuchi Seiho, Uemura Shoen, pupils of Bairai.

What distinguishes this school from others is that it counts among contemporary painters several followers who by adopting their style to the new things are displaying great activity.

The Ukiyoye school had Kuniyoshi, Yoshitoshi, Toshikata, and the contemporary painter Kaburagi Kiyokata (pupil of Toshikata), but the style that was in vogue in the pre-Restoration days has no longer any worthy representative.

Though the Korin school produced no artist worth mentioning after the death of Kichō, its influence so far as regards decorative effect was plainly visible till only a short time ago.

The Chinese school was well represented, notable workers being Chokunyu, Hirano Gogaku, and Kodama Kwatē, pupils of Chikuden; Noguchi Yukoku, of Chinzan; Taniguchi Aizan, Takahisa Aigai; Noguchi Shokai and Inose Tonē, (whose "One Thousand Carps" has been reproduced in a later edition of *Encyclopaedia Britannica*); pupils of Hine Talzan; Taki Kwatē and Kawamura Ukoku, of Ishizaki Yushi.

Buncho school had Araki Kampo and his pupils Satake Eisai and Satake Eiko.

Influence of Western Painting

It should not be supposed that all that while our painters were contented with the flattering comment offered by foreign critics and with merely adhering to the traditional canons of the native style. This was far from the case. The idea that they should do something towards shaking themselves free from the trammels of the conventional rules and perhaps should bring their art more in touch with the canon of the European style began to take firmer hold on the minds of our painters. So far as respects the latter point the idea was not a novel one, on the contrary even the great Okyo (d. 1795) and his contemporary Goshun are believed to have received some inspiration from the study of some Dutch copper plates brought by Dutch traders to Nagasaki. But now the serious attention of the whole world of art was centred on the same problem. The establishment of the Tokyo Fine Art Academy by the Government in 1889, itself a memorable incident in the history of Japanese art, simply served to foster the Europeanizing inclination, for the President himself, the late Mr. Kakuzo Okakura (d. 1917) who was a great critic and a man of wide parts, and the two greatest professors in painting, Hogai and Gaho, were in favor of the new movement. The two masters themselves set the example in essaying experiments in the new direction. Hogai's celebrated picture of the Goddess of Mercy is regarded memorable in this connection, while Gaho carried the innovation a step further in his Buddhist image and the Dragon exhibited in the 4th Domestic Exhibition held at Kyoto in 1895. The movement was of course zealously taken up by younger artists, and these, carried away by excessive ardor, very often overstepped the proper bounds and produced works that shocked the fastidious taste of purists. The success of this movement has so far been a mixed one. That our artists have begun to effect greater precision in their delineation, as, for instance, in perspective, may be recorded to the credit side of the movement; but in regard to that bolder attempt, that of bringing Japanese painting more in touch with Occidental, this has been a failure.

3. ROMANTIC MOVEMENT, c. 1898

Meanwhile the policy of the Department of Education had swung round in favor of reaction, and Mr. Okakura and the progressive professors had to resign. This occurred in 1898. The secessionists, including the master-painter Gaho, for Hogai was no more, at once started the Nippon Bijutsu-in (Japan Fine Art Institute), boldly raising the banner of "New Japanese Painting." The audacious step they took hastened the evolution of a new style, though it took ten years or so before the secessionists succeeded in overcoming the public prejudice to their new method which was at first freely criticised as "nouveau." They included some of the foremost middle-aged master-painters of the time, as Yokoyama Taikan, Shimomura Kanzan and Hishida Shunso, the last who was the most original of all, dying prematurely in 1911 at the age of 38.

By the time the Government Art Exhibition, ("Bunten," for short), conducted by the Department of Education was opened in 1907 the romantic movement had so far gained public appreciation that the Government was obliged to appoint several of the Bijutsu-in members to the hanging committee. The conflict of views between the progressive and conservative elements, however, continued for some while to annoy the authorities in the yearly appointment of the hanging committee, causing the resignation of the Bijutsu-in men from the committee and the reopening of their own gallery called "Inten" for short.

Japanese Painting

It was an ambitious idea that inspired the secessionists from the Government Academy of Art inasmuch as they aimed at introducing to Japanese painting, while retaining the subjective execution which is the very *raison d'être* of the Oriental painting, a realistic style differing from the objective method on which the Occidental art is based. Driven by the zeal to establish a new tradition several of the leading reformers have visited Europe, India and China, for research and study. It is encouraging to note that despite grave obstacles standing in the way of these ardent men, they have, by dint of their concentrated efforts, fairly succeeded in removing the original crudity and producing pictures possessing great merit by calling in aid various devices, such as emancipation of subjects and technique, fresh sensation in form and coloring, and so forth.

The question will naturally arise, where is the time-honored classic tradition? It is of course too hasty to conclude that it has been deserted by living artists, but at the same time it can not be denied that it is distinctly under a cloud. The fact is it can hardly thrive in such an uncongenial atmosphere as is now found in Japan, thoroughly permeated as it is by the materialistic and order-hating spirit. The tradition is feebly kept up by cultured dilettants and men of letters who produce for their own delectation regardless of any fickle change in public taste. To all the others the reform movement is too strong to be resisted, though of course in varying degrees. The *Nippon Bijutsu Kyokai*, for instance, is most conservative in this respect, and is even inclined to adhere more closely to the orthodox style than the majority of those artists whose works are acceptable to the hanging committee of the Imperial Academy. The *Kokuga Sosaku Kyokai* (their gallery called "Koku-ten" for short) organized by a number of young radicals in Kyoto occupies the other extreme, these aspiring to reform Japanese painting along cosmopolitan lines and to carry it to the level of the modern painting in Western Europe. In other words, the Koku-ten radicals have in their eyes a realistic impressionist attitude as opposed to the idealistic realism of the Bijutsu-in school. It is worthy of note that of the three different groups, that identified with the conservative *Nippon Bijutsu Kyokai* stands lower in public esteem than the other two, showing the trend of public taste.

This change in public taste is of prime importance for those professional workers in canvass and pigments whose main aim is how best to live and not how to leave their fame to posterity, and who therefore are willing to meet the demand of their

monied patrons, mostly parvenues and stock-brokers with low taste and picture-dealers bent on pandering to it. It is consoling to notice that amidst such corrupting surroundings there are found a number of painters sufficiently strong in their conviction and really faithful to their noble mission to resist the tempting demand and sternly repress sordid cravings. These are Yokoyama Taikan, Kikkawa Reika, Hashimoto Kansetsu, Takeuchi Seiho, Hirafuku Hyakusui, Matsuoka Eikeyu, Kaburagi Kiyokata, and a few others. The first three or four may be briefly described to show the healthy aspect of Japanese painting of today.

Taikan towers over all the member-artists identified with the Inten and shares with Seiho the enviable fame of commanding the highest price for his works. Tutored at first under masters of the classical Kano school, notably by Hashimoto Gaho and Kano Hogai, his eclectic researches into diverse schools, both Oriental and Occidental, have resulted in the present style marked by its fire and vigor for which he is probably indebted to his original training in the Kano school. Among his fellow members, for the Inten follows the round-table system, there are such well-known painters as Kanzan, Kokel and Yukihiro.

Kansetsu retains in greater degree than Taikan the characteristic features of the Oriental painting in the broad sense, for coming originally from the Shijo school founded by Goshun, a contemporary of O-kyo, he has assiduously studied the masters of the Southern school both of Japan and China. And true to the best tradition of that school he has attained equal mastery both in brush-work and handwriting. Perhaps as a Chinese scholar he stands foremost of all his brother craftsmen. He allows only a few followers.

Reika, the youngest of the three, occupies an interesting position in the present pictorial art of Japan, as he represents to some extent the renaissance movement of the old Yamatoye style, that of the classic schools of Tosa and Sumiyoshi, both strong on depicting ancient manners and customs and also, religious subjects, as the Kano and Southern schools are noted for landscapes. With Reika are associated the names of Kobori Tomone, Academician, his master, Matsuoka Eikeyu, a fellow pupil, and Kaburagi Kiyokata, acknowledged leader of the Ukiyoye school as modified by the new surroundings.

Seiho comes from the pure Shijo school and is a painter of wonderful versatility and amazing technical skill. As a master of pictorial *bon mots* he has no equal, but this cleverness is his weakness, for he has seldom produced, as the other three have, any grand work touching the deeper chords of men. He is acknowledged as the prime leader of almost all the painters of Kyoto, for even Kansetsu studied at his atelier for a short while.

Western Painting

Pioneers.—Though pictures brought by Dutch traders are believed to have been studied by Japanese painters who lived in the middle of the Tokugawa period, the honor of having studied oil painting with serious purpose must go to Kawakami Togai (d. 1881) who was a professor of the Dutch language in the *Kaisai-Gakko*, forerunner of the present Imperial University of Tokyo. Among his pupils, the late Takahashi Yuichi and Koyama

Shotaro have risen to distinction. The former subsequently studied under Charles Wirgman (d. 1891), London "Daily News" correspondent in Tokyo who was an art amateur of exceptional power. He took many Japanese students of Western painting and initiated them into the technique of the art. Among his pupils may be mentioned Goseda Yoshimatsu and Yamamoto Hosui, and the former had the honor of sketching from life a portrait of Emperor Meiji in 1878, a rare distinction in those days.

The short-lived Art Department (1876-1882) affiliated to the Gov. Engineering College in Tokyo with Italian instructors in charge did not contribute much in promoting the diffusion of this art, for it was attended by only a small number of students who moreover rebelled against their teachers. The only graduate who afterward won fame as a painter and more especially as a teacher was the late Prof. Koyama Shotaro, who kept his atelier after the close of the Department. Fortunately there were about that time three or four Japanese painters of Western style who came back from their study abroad, these being Kunisawa Shinkuro (d. 1877) who returned in 1873 from England where he studied under John Wilcomb, Kawamura Kiyoo who learned at the Academy of Venice from 1871 to '86, Harada Naojiro (d. 1899) who was in Gabriel Mack's atelier from 1884 to '88, and Yamamoto Hosui who was under Jerome in the Academy of Paris from 1878 to 1887. All these young Western painters of Japan took under them a number of students.

Romanticism.—The restoration of the Western painting course with the creation of the Tokyo Art Academy in 1889 of course considerably encouraged the study of this exotic art, while the return of Mr. (2nd Vis.) Kuroda Seiki (d. 1923) in 1893 after studying under Collin at Paris, and of Messrs. Kume Kei-ichiro and Iwamura Toru about the same time also from Paris, also gave great animation to the progress of this style of painting. They with the support of graduates from the Gov. Art Academy organized in 1896 the Hakuba-kai, a society comparable in its romantic ideal to the Bijutsu-in for Japanese painting.

The Situation

Paris continues as primary source of inspiration to Japanese painters in oil, all of whom are consumed by the desire to visit the French capital. Indeed the stream of those returning home from it and others starting for it is constantly kept up, so that every change in the style practised in Paris quickly finds its way to Japan, for being so fascinated by the French art our oil-painters leave London and Munchen in utter neglect.

The Impressionism that once held sway was superseded by the style of Van Gogh and Cezanne, but today the influence of such Neo-Classicists as Beraud, Bissiere, and Lhote is much in evidence. It should not be concluded that Japanese oil-painters are contented with slavish imitation of the French school; on the contrary the cry to achieve independence by means of assimilating the tradition and taste characteristic of Japan is gathering strength.

At present the Imperial Academy is Impressionist while the Nika-kai occupies the opposite camp, being composed of those reformers who rebelled against it.

Though for bread-earning purpose the exotic art is still a poor staff to rely on and a European style painter of Japan is under serious economic disadvantage compared to his brother craftsmen of the native style, the fact remains that the ranks of students of Western painting, whether at the Art Academies in Tokyo and Kyoto or at private ateliers, are far increasing in number than those of the native. The explanation is because these new aspirants are repelled by the necessarily unsystematic method of teaching of painting masters of the native style, and also because the charm of novelty is irresistible to their unsophisticated minds. What is significant in this connection is that though European style painters very often pass over to the indigenous school of painting, as witness Kosugi Miso and Kawabata Ryushi who have blossomed forth as popular painters of native style after deserting the European, the reverse is seldom heard of.

Sculpture

With the art of indigenous wood-carving brought to degeneration in consequence of the decay of Buddhism while the patronage extended to Western sculpture is still scanty, for the custom of erecting statues or decorating the hall with engraved objects is only a recent innovation, our sculptors are much handicapped in their activity. Here again the French influence is conspicuous. Rodin's day is practically passed, and now Maillol, Bourdelle and Archenko are popular.

Applied Arts

There were not wanting in the later days of the previous era craftsmen of no common talent, but most of these master artisans ended their careers in obscurity before order had been restored and a new era of sanity and discriminative appreciation in objects of taste and decoration began to dawn. Among the artisans who lived in the unfortunate period of transition were Goto Ichijo (1790-1876) for metal-work, Nakayama Komin (d. 1870) for lacquer-work, Miura Kenya for pottery, to mention only a representative worker in each line. The first of the honorable line succeeded in reviving the classic style of the Goto family with some modification; Komin was noted for elaborate finish and nice workmanship, being celebrated for imitating antique wares, while Kenya, who learned the art from the celebrated Ogata Kenzan, was considered in the middle of the 19th century as the greatest potter of the time. It was after his death that his merit was appreciated. However better days were in store for workers in applied arts, and in changed circumstances they were more than compensated for what they had lost, in patronage and in educational facilities.

Metal-Work.—In place of making "tsuba" and other sword-decorations, our metal artists and craftsmen carve now on vases, censers, statuettes and diverse sorts of hall decorations intended for larger consumers, both native and foreign, than the "daimyo" and "samurai." The benefit of division of labor and of regular education, too, constitutes a powerful factor in promoting a greater improvement of the art. This improvement will be apparent when works produced before the Meiji are placed side

by side with those of later production. The wares coming under the former present as a rule lack of proportion or other defect of unnaturalness. Of the four divisions of metal-work, i.e. casting, chiselling, hammering and inlaying, the first has the largest guild of all metal-workers, among whom the names of the late Prof. Okazaki Sessel (d. 1921) of the Gov. Art Academy, Suzuki Chokichi (d. 1919) both casters to the Imp. Court, Prof. Katori Shushin of the Art Academy from which he graduated in 1897, and Oshima Jo-un, the last reputed as the greatest living master of wax-modelling. He produces hall-decorations. Okazaki cast a number of bronze statues, Suzuki produced eagles, dragons, etc. in silver, while Prof. Katori is at home in classical designs.

Interesting to state, the public recognition of the modeller's position as being at least equal to that of the caster dates from the time of the Paris Exposition held in 1900 when a highly finished statuette sent by Prof. Okazaki Sessel was refused admission to the art gallery on the ground that it was an applied art object. For the first time the demarkation separating pure from applied art as regards casting was brought home to the minds of our artists, and the modeller was allowed to emerge from obscurity. It should be remembered that in the eyes of Japanese a rough work taken out of the mould was, as still largely so even today, an incomplete piece requiring finishing touches of a caster, who claimed all the honor for any merit possessed by the article. An ambitious modeller was driven in these circumstances, to turn to a caster at the earliest opportunity.

For chiselling the list includes Kano Natsuo, mentioned before, his pupil Kagawa Katsuhiko and Unno Shomin (d. 1915) and his son Unno Bisei (d. 1919), all of them Profs. at the Govt. Art Academy, and Tsukada Hideaki. The elder Unno, formerly a sword-decorator to the Lord of Mito, was noted for his human figures; the younger, besides working on medals and decorations, produced decorative objects; Kasuga chiselled flowers, birds and landscapes, while Tsukada loved to work on a larger field, i.e. iron or copper plaques.

Hammer-Work.—The Profs. Hirata Soko and Hirata Juko, cousins and Prof. at the Govt. Art Academy, stand high as figure-hammerers. Kurokawa Eisho was prominent in hollow articles, while Yamada beat animals out of iron, a feat unparalleled not only in modern time but even in the old. Inlaying has several different styles and about the time of the Restoration Takaoka city, Toyama-ken, was the principal centre for this kind of work. Kajima Ippu (d. 1900), Kurokawa Eisho and Suzuki Gensuke who died about ten years ago produced flower-vases, cigarette-boxes and similar articles worked out in exquisite style.

Ceramics

First the imitation of old Chinese and Japanese masterpieces and next the production of wares for foreign patrons are the outstanding features in Japanese ceramic art during the period of about half a century extending to the present day. The imitation was extensively practised from about the latter part of the Tokugawa period to supply the demand of votaries of the tea-cult and connoisseurs in general, and most of the master-potters of

the time had to stoop to play this humiliating part. Such were Seifu Yohel, the First and the Second, Miyagawa Kozan (d. 1920) Suwa Sozan (d. 1922), all potters to the Court, and some others. The opening of kilns at Nagoya, Kyoto, Mino and Kaga for producing export wares between 20 and 40 years ago is a new innovation, chiefly as an industry.

With Satsuma, Arita and Kutani degenerating in the art of producing high class objects, Kyoto has practically monopolized the field during the fifty years under review, and it was in Kyoto that Yohel, Miura Chikusen (d. 1918), Takahashi Dohachi (d. 1915) Shimizu Rokubei, Ito Tozan (potter to the court), have flourished or still do. Kozan, who had his kiln at Yokohama, now kept up by his son Hanzan, originally came from the same place, and Sozan of course stood high among Kyoto potters. The present Seifu Yohel has succeeded his father (d. 1860) both in name and profession, but is reputed to excel his predecessor in technical and artistic skill. His celadon and monochromes of reddish hue are delightful specimens of art, as also his reproductions of old Chinese masterpieces. Dohachi and Rokubei are said to fall below their predecessors in ability. Chikusen produced soft wares of the Cochín-China style.

Tozan, who has his kiln at Awadaguchi, is admitted to be an artist of great calibre with high creative power. His falence in seven colors has won universal admiration. Sozan produced such exquisite reproductions of old China that very often they were sent to Peking by unscrupulous merchants to be sold there as genuine, and it is said that he was now and then amused and annoyed to have his reproduced celadons submitted to his critical examination by ingenuous Japanese who had paid high prices for their "fnds" in the Chinese capital. It was not long before he began producing his celadons in his own name and they were highly appreciated by connoisseurs.

Kozan, whose wares were known under the name of Makuzu-yaki, was at first a great imitator of old Chinese masterpieces but his "imitations" were more in name than in reality, for they invariably bore marks of his own originally stamped upon them. A ceramist of wonderful versatility, he was equally at home either with porcelain or falence, monochromes or polychromes.

Awada-yaki has practically superseded Satsuma-yaki which it closely resembles in quality and design, being, however, cheaper. The predecessor of the living potter Kinkozan Sobel was for some while engaged by the Prince of Satsuma and started this imitation Satsuma.

"Shippe" (Enamel Ware).—Owari retains the credit of being the centre of this art and industry. Tokyo boasts Namikawa Sosuke (d. 1911) and Kyoto Namikawa Yukiye, both first class artists in this particular branch of ceramics, but Nagoya has several, of whom Ando Jubel, Hattori Tadasaburo, and Ota Jin-emon are prominent. In the matter of output Nagoya supplies 70 to 80 per cent., the balance being distributed between Tokyo, Kyoto and Yokohama.

The progress in recent time must be said to date from 1880 when Namikawa of Tokyo produced the celebrated cloisonnéless ("musen") ware and erased cloisonné ("shosen"), in which the wires were eradicated by the action of sulphuric acid. The next new departure was translucent enamel by the use of French

enamel and this was followed by a change in the nature of the body used. Copper had formerly been the most popular metal but the introduction of the new enamel suggested the use of a silver base as providing a better background.

Another improvement made is the production of reddish monochrome in 1904 by Ota by the use of gold chloride. Thanks to this discovery Japan can now produce ware of this particular monochrome of almost any size that may be desired. The "moriage" (piled) style originated by Hattori is also a new process.

Lacquer Art

The art and craft was considerably improved by Zeshin (d. 1891) and his pupils Uematsu Hobi and Ikeda Taishin (d. 1903), but generally speaking, till only a few years ago, "makiye" artists made it a point to follow slavishly in the wake of old masters in designs, workmanship and kind of work. Some of the leading contemporary artists seem to have discerned the signs of the times and to have been inspired with the new spirit which has come over Japan subsequent to the 1904-5 war. Since then they have been endeavoring to produce objects with bolder and more animated designs based on sketches from nature. Among prominent artists are Kawanabe Itcho (d. 1910), once a Prof. at the Govt. Art Academy and Akatsuka Jitoku who is well grounded in painting.

Textile Fabrics

It was in the time of Hideyoshi that the art of weaving and dyeing made notable progress, under the tutelage of some Chinese artisans who came to Sakai near Osaka, a regular port of call for Chinese junks in those days. Figured silk fabrics, light and heavy, were thus introduced, the initiated being mostly weavers and dyers of Kyoto. Hideyoshi caused these men to live at Nishijin, Kyoto, so that its fame for costly textiles dates from his period. From that time till the beginning of the Meiji era weaving and dyeing and embroidery made a marked development in response to the more refined taste resulting from the growing prosperity and the higher standard of living. The gorgeous manners of the Momoyama period and the indulgent habits of the Genroku era called into existence stuffs of diverse quality and designs. It was then that "yuzen" (printed-decorations) and "some-ye" (pictorial printing) and various styles of embroidered stuffs were originated. For the development of the heavy embroidered stuff the custom of Japanese ladies of wearing the "obi" was mainly responsible, as it is still today, though since the opening of the country to foreign intercourse, tapestry, table-cloths or bed spreads for foreign or home consumption represent no small quantity of the total output of heavy stuffs turned out by our weavers. The art of embroidery especially has seen a radical change since the Restoration, for besides small embroidered pieces or Japanese "fukusa" (ornamental woven wrapper) used from former times, embroidered "byobu" (folding screens), fire-screens, wall decorations, all for foreign patrons, are now produced, embroidered figures as worked out by first class experts in Kyoto being really things of delight. These experts are specialists, some being strong in landscapes, others in birds and flowers, and so

on. In some cases, owing to the lustre of the silk yarns used, the reproduced figures look more faithful to life than the original designs furnished by the painters. The notable names in this special line of textile fabrics are Kawashima Jimbei, Date Yasuke (both weavers to the Court), Sugawara Naosuke, Tatsumura Heizo, and Nishimura Sobei (for dyeing). Kawashima (d. 1910), Nishijin weaver, chiefly produced brocade and the "tsuzurenishiki," the latter to rival Gobelins. Date (d. 1892), also Nishijin, studied old fabrics of China, India and Italy and revived the fame of Nishijin for heavy stuffs; Sugawara, a self-made man, embroidered a reproduction of the celebrated masterpiece of Kano Hogai, the "Goddess of Mercy"; Tatsumura attempted with success to produce the effect of wood-carving, pearl-inlaying, etc. with embroidery, and is also a deep student of old fabrics. Nishimura is unrivalled for printed-decorations.

4. ART SOCIETIES AND GALLERIES

Teikoku Bijutsu-in or the Imperial Academy of Art. This is the highest seat of art in Japan and corresponds to the Royal Academy of Arts in England. Its creation in 1919 was mainly prompted by the idea of removing the almost perpetual wrangling between the conservative and radical elements of the Hanging Committee as appointed by the Department of Education for its art exhibition held every autumn. It has since been conducted under the direct supervision of the Academy, so that the Department is now only indirectly responsible for it. The Academy consists of a president, managers and 20 members who sit ex-officio on the Hanging Committee. There are also occasional members appointed every season by the Department from among artists of established fame and on the recommendation of the Academicians, who hold their positions for life. Naturally the "radicals," such as those identified with the "Inten" coterie are excluded from the honor. There are three ways of recognizing the merit of superior works, i.e. "Honorable mention," and "Recommended" (Suisen), revived in 1928, and Academy prize. The latter system was adopted in 1924, but it was only in the exhibition of 1925 that it was put into effect.

The Academy is composed as follows:—

President, Ryozauro Fukuhara; Managers, Naohiko Masaki, Kei-ichiro Kume, Nobuyoshi Akama; Members—Japanese painting—Gyokudo Kawai, Tomone Kobori, Seiho Takeuchi, Shunkyo Yamamoto, Sul-un Komuro, Jippo Araki, Somel Yuki, Kako Tsuji, and Keigetsu Kikuchi; Western painting—Eisaku Wada, Saburo-suke Okada, Fusetsu Nakamura, Takeji Fujishima, Kunishiro Mitsudani; Sculpture—Ko-un Takamura, Fumio Asakura, Seibo Kitamura. Names of the Occasional Members on the Hanging Committee appointed for the 1928 "Teiten" Exhibition are:—

Japanese painting—Bokusen (Shimada), Daizaburo (Nakamura), Eikyu (Matsuoka), Gengetsu (Yazawa), Heihachiro (Fukuda), Kiyokata (Kaburagi), Koho (Hiroshima), Manshu (Kawamura), Shuzan (Hida), Sulho (Nishiyama), Tekison (Uda); also 5 Academicians, Gyokudo (Kawai), Tomone (Kobori), Sulun (Komuro), Seiho (Takeuchi), Kako (Tsuji).

Western painting—Mango Kobayashi, Toraji Ishikawa, Heizo

Kanayama, Tokuro Katata, Kunzo Minami, Ikunoshin Shirataki, Toshichi Takama, Hisashi Tsuji, Kan Arai, Kyuta Yuzuki, Kumaji Aoyama, Takeshiro Kanokogi, Morinosuke Yamamoto, Eisaku Wada, Saburosuke Okada, Fusetsu Nakamura, Takeji Fujishima, Kunishiro Mitsudani.

Sculpture—Eisaku Hasegawa, Shinji Hori, Hisatsugu Yoshida, Ki Ando; also the 3 Academicians.

Applied art—Shinobu Tsuda, Kamezo Shimizu, Shushin Katori, Jitoku Akazuka, Shisui Rokkaku, Eiichi Ishida, Rokubei Shimizu, Hazan Itaya; also Seiho (Takeuchi), Somel (Yuki), Eisaku (Wada), Sanzo (Wada), Fumio (Asakura).

The living artists of note granted highest honor at the former "Bunten" and its successor the "Teiten" exhibitions make a short list, as the Academicians and the above-mentioned members of the Hanging Committee are omitted to avoid repetition. The list is given below.

Japanese painting—Shodo, Koho, Keisen, Shoko, Kagaku, Chikuho, Kenzan, Daisaburo, Tomiji, Chikuha, Kokkan, Michihiko, Chikusai, Shuko, Tadao (Yoshimura), Yako, Hoshun (Yamaguchi), Tekison.

Western painting—Kumaji Aoyama, Yasugoro Ataka, Kan Arai, Tanewo Gonto, Gompachiro Hiraoka, Hakutai Ishii, Ryumon Yasuda, Seiki Iwasaki, Sei-ichi Kawai, Misel Kosugi, Shin Kuroda, Masajiro Kawai, Yoshihiko Kumaoka, Kinji Koshiba, Ichiro Kiku, Kanteki Kin, Torao Makino, Chu Moriwaki, Kin-ichi Nakamura, Ryutoku Ono, Takatsugu Sekiguchi, Ki-ichi Soma, Tokujiro Satake, Yori Saito, Yoshio Shimizu, On-ichiro Tomita, Soshichi Takama, Yoshio Tatara, Goro Toyama, Shigeru Yoshida, Kyuta Yuzuki.

Sculpture—Ryo Goto, Shoshi Horiye, Shigeo Kawasaki, Ki Mafuji, Daiju Sasaki, Sho-un Sekino, Keika Shibata, Kanji Yo, Hisatsugu Yoshida.

In the 1927 exhibition the Committee's decision was as follows:—

No. of works submitted				No. of exhibits selected			
J.P.	W.P.	S.		J.P.	W.P.	S.	
1,875	2,415	198	1,015	253	225	117	

N.B.—J.P.—Japanese painting; W.P.—Western painting;

Besides there were some exhibits without examination, including those of present and former members of the hanging committee.

N.B.—J.P.—Japanese painting; W.P.—Western painting; S.—Sculpture; A.A.—Applied Arts.

The Academy prizes were awarded to Kiyokata Kaburagi (J.P.), Itaru Tanabe (W.P.) and Yoshisumi Yokoe (S.).

The honorary mention nominees were:—

Japanese Painting.—Shinsui Ito, Bisho Touchi, Yako Okochi, Bokuyo Katayama, Keika Kanashima, Tadao Yoshimura, Saiten Tamura, Hoshun Yamaguchi, Kwayo Yamaguchi, Ichiyo, Matsu-moto, Shumpo Yukimatsu, Kenzan Midzuta, Shumel Mori.

Western Painting.—Elzo Okuse, Juji Kanazawa, Yoshimatsu Yoshimura, Kazutaka Nakano, Seiko Uenoyama, Shinsei Kusa-

mitsu, Kwanji Maeda, Manjiro Terauchi, Jishu Aida, Yori Saito, Chikuma Suzuki.

Sculpture.—Yoshizumi Yokoe, Kiyoshi Nakagawa, Katsushiro Murata, Naoyuki Matsuda, Shimpel Akabori, Tora Sawada.

Applied Arts.—Toyochika Takamura, Seika Yamaga, Shodo Sasaki, Senroku Kitahara, Shizan Morikawa.

Nippon Bijutsu-in or "Inten" round-table members.—As casually mentioned before this group has no honor or prize regulation though as regards the market price a wide difference separates works of one member from those of other. The admission to the group is very strictly guarded so that its membership is very highly valued by artists and the public in general. The roll now contains forty members, as follows:—

Kampo Arai, Tokan Fudeya, Koyu Fujii, Eiho Hashimoto, Selsui Hashimoto, Denchu Hirakushi, Gyoshu Hayami, Ryumon Yasuda, Tsuruzo Ishii, Buzan Kimura, Seiju Omoda, Ryushi Kawabata, Koichiro Kondo, Tsunetomi Kitano, Kokel Kobayashi, Nampu Katayama, Kahaku Kobayashi, Reimei Shindo, Seison Maeda, Gakuryo Nakamura, Sofu Nagano, Shokan Ochi, Usen Ogawa, Chozan Sato, Kanzan Shimomura, Sanryo Sakai, Senjin Satokura, Kelsen Tomita, Fudo Tomitori, Hakuryo Yoashida, Taikan Yokoyama, Yukihiro Yasuda, Koka Yamamura.

"Inten" and "Nika" galleries.—Both jealously guard the door of their galleries to admission of strangers. In the 1927 exhibitions the former selected only 38 pictures out of the 385 sent in and 43 sculptural works out of the 141 submitted. "Nika" selected 220 pictures out of 3,338 sent in, and 19 carved pieces as against 40 entered. It awards the Chogyu prize named in memory of Chogyu Takayama, a well known critic who prematurely died some 15 years ago.

International Exchange of Art Exhibitions

At the invitation of the Museum of Cleveland (Ohio), an exhibition consisting of 38 pieces by the contemporary Japanese artists was held in 1921 at Boston, Chicago, Washington, St. Louis, Cleveland, New York, Philadelphia, etc.

Between April 2 and June 30, 1922, about 150 Japanese paintings both of native and Western schools, some pottery, lacquer ware, castings and textile fabrics besides 100 old masterpieces were exhibited at the Salon of the French Academy, as the first attempt of exchange exhibition between Japanese and French objects of arts. Seiho Takeuchi, Taikan Yokoyama (both Japanese painting), Saburosuke Okada and Eisaku Wada (Western painting) were recommended as members of the Salon. In August the same year a number of pictures and carved objects by French artists were exhibited in Tokyo.

International Art Society.—The exchange of art displays has repeatedly been made recently with China, France, Germany, Russia, etc., and this exchange has almost become a regular feature in the season every year. To facilitate this refined international undertaking, an International Art Society was created in Tokyo in June '28 by a large number of distinguished people, with Marquis Komatsu as chairman and Director Masaki, Gov.

Art Academy, vice chairman. At first Japanese display will be given once in three years at suitable places abroad.

5. NATIONAL TREASURES

The Commission for Preserving Old Temples was first created in 1887 by law and ordinance, appropriating for the purpose a sum varying from ¥150,000 to 200,000 a year. The protection is now extended also to pictures, sculptures, buildings, old documents of historical value, and recently to swords, all kept in Shinto and Buddhist temples. The treasures included in the list are under strict control of the National Treasure Preservation Committee expressly organized for the purpose and made subordinate to the Education Department. The treasures registered from the very beginning numbered 3,348 in March 1926, consisting of pictures (729), sculpture (1,673), applied art objects (313), swords (202), books, Buddhist texts, etc. (431).

There were besides, 1,052 edifices, chiefly religious that are under protection. All these treasures are graded into three classes, according to their relative merits, and the preservation aid is correspondingly differentiated. The architectural structures claim a greater part of the State aids set apart for the purpose. It should be added that the sum granted for preserving an edifice or art objects is generally one half the cost required for upkeep or repair.

6. OLD MASTERPIECES AND CURIO MARKET

Before the National Treasure Commission was created in 1889 to register old masterpieces that belonged to temples and other public institutions, no small number of this sort of national treasures found its way to foreign countries. It is well known, for instance, that of the famous triplets of picture scrolls by Sumiyoshi Keion, one is now at the Boston Museum, while of the remaining two one is in the collection of the Imperial Court and the other belongs to Baron Iwasaki. Among private collectors the names of Marquis Inouye, Baron T. Masuda, the families of Mitsui and Iwasaki, Mr. Tomitaro Hara, a millionaire merchant of Yokohama, etc., stand high on the list. Mr. Hara's "Kujaku Myo-o" is valued at ¥500,000. The Great-war and general increase of wealth has created unusual demand for old masterpieces and curios. The year 1917, for instance, witnessed forty-five big sales in Tokyo, Kyoto, etc., with proceeds totalling about ¥20,000,000, record figures in the annals of auction sales of such goods. The boom continued both in 1918 and '19, about 30 big sales being held in Tokyo and Osaka, taking into account only those with proceeds of over ¥100,000. About ¥10,000,000 worth of old curios and paintings changed hand. In 1919, sales in Tokyo alone totalled ¥11,000,000 in value including those of the two Marquises Ikeda, Prince Konoye and Baron Go, each over ¥1,000,000. Among the notable sales were Gel-ami's paysage, at ¥310,000, "Katawaguruma-no-tebako" (a pyxis) at ¥240,000, Shubun's paysage at ¥159,300. Calligraphic specimens by noted scholars and other great men are valued as much as pictorial masterpieces. In certain sales recently conducted in Tokyo and Osaka a small

sheet of Ono Tofu's (d. 966 A.D.) handwriting was knocked down at ¥32,000, calligraphic "kakemono" by Soral (d. 1728) at ¥11,000, and a pair of folding screens with Chinese poems by the late Prince Ito fetched ¥20,000. Old vessels of repute used in tea-ceremony also command extraordinary prices, a tea-caddy of rare note changing hand in a recent auction at ¥57,000.

The prices of curios have dropped by about 50% since the economic reaction subsequent to the War and especially after the disastrous earthquake-fire of September 1923 when priceless treasures were lost to an unknown extent. In the auction given by the House of Mayeda, perhaps the largest collector in Japan, over one million yen was realized, though the articles put to hammer were of second rate grade, for the great peer was obliged to clear the superfluous accumulation for convenience of his removal to a new residential seat. A piece of a historic tea-caddy was knocked down at a little over ¥57,000. It would have commanded at least twice as much before.

All big sales are generally conducted by bodies of curio dealers, and there are several such organizations in Tokyo, Kyoto, Osaka and Nagoya. Some of them are,—Tokyo Bijutsu Club at Shunkyo (Painting), Takamura Koun (Chiselling), Sasaki Iwajiro (Architecture), Namikawa Yasuyuki (Shippo), Miyamoto Hosoku (Sword).

7. ARTISTS TO THE COURT

This is an honorary post created in 1890 in order to encourage the development of art. At first the honor was limited to only Japanese painting, but the scope has lately been much extended and includes among others sword-making. The living artists who enjoy this honor are:—

Takeuchi Seiho (Painting), Kobori Tomone (Painting), Kawai Gyokudo (Painting), Shimomura Kanzan (Painting), Yamamoto Shunkyo (Painting), Takamura Koun (Chiselling), Sasaki Iwajiro (Architecture), Namikawa Yasuyuki (Shippo), Miyamoto Hosoku (Sword).

PAINTERS OF NOTE IN THE MEIJI ERA

(1868-1912)

Araki, Kwampo, d. '15, master painter of Chinese Northern school.
Hashimoto, Gaho, d. 1908, master painter of Kano school.

Hirano, Gogaku, d. 1893, celebrated painter of Chinese Southern school.

Hishida, Shunso, d. 1911, master of a new school.

Ikeda, Shoen, d. 1915, ukiyoye lady painter.

Kano, Hogai, d. 1888, master painter of Meiji era.

Kawabata, Gyokusho, d. 1912, master painter of Shijo school.

Kawanabe, Mitate, d. 1905, Tosa school and high authority in antiquities.

Kawamura, Oshin (Ukoku), d. 1806, master of Southern school.

Kawanabe, Gyosai, d. 1889, originated a new Popular school.

Kikuchi, Yosai, d. 1878, originated the Yosai style.

Kishi, Chikudo, d. 1895, Kyoto painter.
 Kodama, Kwatel, d. 1913, master painter of the Southern school.
 Kono, Bairei, d. 1905, Kyoto painter of the Shijo School.
 Kumagae, Naohiko, d. 1913, mater landscapist of the Shijo school.
 Kuroda, Seiki, d. 1925, painter of Western School.
 Masugi, Seikin, d. 1901, lady painter, pupil of Kumagae Naohiko.
 Mochizuki, Gyokusen, d. 1901, master painter of the Shijo school.
 Mori, Kwansai, d. 1894, one of masters of Okyo's school.
 Morikawa, Shobun, d. 1902, Kyoto painter of the Shijo school.
 Nakajima, Raisho, d. 1871, Okyo school.
 Nakanishi, Shoseki, d. 1883, Prof. in Kyoto Art Academy.
 Noguchi, Shohin, d. 1917, master painter of Southern school, a lady.
 Noguchi, Yukoku, d. 1898, Southern Chinese school.
 Nomura, Bunkyo, d. 1911, landscapist of the Shijo school.
 Okuhara, Seiko, d. 1903, lady painter of the Southern school.
 Saigo, Kogetsu, d. 1912, one of the best pupils of Gaho.
 Shibata, Zeshin, d. 1891, painter and Makiye artist.
 Shiwohawa, Bunrin, d. 1877, landscapist of the Shijo school.
 Suzuki, Hyakunen, d. 1891, master of Okyo style.
 Suzuki, Shonen, d. 1910, son of above, same school.
 Takahashi, Koko, d. 1912, at the age of 36.
 Taki, Kwatel, d. 1901, Chinese Southern school.
 Taniguchi, Aizan, d. 1899, master of Chinese Southern school.
 Tanomura, Chokunyu, d. 1906, Southern style.
 Tazaki, So-un, d. 1898, master painter of Buncho's school.
 Terasaki, Kogyo, d. 1919, a master of new school.
 Watanabe, Shokwa, d. 1887, son of Kwazan and pupil of Chinzan.
 Yamamoto, Baiso, d. 1920, Southern Chinese school.
 Yasuda, Rozan, d. 1882, Southern Chinese school.

DESIGNS

From the Early Days of Meiji to the Russo-Japanese War

The tide of Western civilization which flooded over our shores after the Restoration of Meiji attained its high water mark about 1887. But this did not much affect patterns for women's dresses. Most of the designs were symbolical and represented felicitous objects, as pine-trees, plum-trees and bamboos, or grapes. All were done in a sombre, realistic manner, and seldom exceeded the height of about 1.5 feet at the skirt.

The Genroku (1688-1704) Designs in 1905-06

With the elevation of our national prestige after the war with Russia, our people naturally took a fancy to things symbolic of grandeur and gorgeousness in composing their designs. What was called the "Genroku" design came into vogue, and "Genroku" sleeves and "Genroku" style of doing women's hair were the rage. Even the so-called "Genroku" dance very much enlivened the gay society at one time. People were then in such a mood that the sumptuous fashion that marked the administration of the 5th Shogun Tsunayoshi strongly appealed to their fancy and they eagerly copied the ostentatious manners and customs seen in the streets of Yedo more than two centuries before.

Momoyama Style and Korin Designs

Next the "Momoyama" style came into fashion but was soon superseded by the Korin designs named after the great decorative painter Ogata Korin.

Though much different from the "Genroku" designs in motif, the effect aimed at was none the less gorgeous. It was about 1908 that the revival of this style of designs took place.

Yushoku Designs

Both the "Genroku" and Korin designs have much in common as regards general appearance and in origin and were principally intended to cater to popular taste. In 1910 and 1911 a reaction came and they were followed by the classic style known as "Yushoku" designs based on the patterns and marks shown on the official costumes of courtiers and others in the Fujiwara era. Aristocratic in origin and use they look elegant and dignified.

It was as if the "Yushoku" were intended to prepare the people for the stern repression of what is gay and ostentatious in designs, called for by the demise of Emperor Meiji in 1912. Out of deference to the Imperial mourning and to show their heartfelt sorrow for the passing of the great sovereign whom they profoundly revered, they chose designs that were subdued and plain in colors and composition.

Exotic and Coronation Designs

The expiry of the period of national mourning was signalized by the return of "Genroku" and "Korin" styles, but only for a short while. The turn that came next is interesting, as it signifies the enlargement of the mental horizon of our designers. They attempted for the first time to enrich their repertoires with the help of exotic patterns, that is to say, by the introduction of secession style that had first appeared in Austria and also flourished in Germany, and these were much in evidence in the year of the coronation of the late Emperor Taisho. Gorgeous colors and patterns symbolizing felicity were principal features.

Subsequent Changes

The Coronation designs were, however, a passing phenomenon, and as the popular sentiment of joy over the auspicious occurrence subsided, the elegant and delicate style of the Tosa school in painting was given preference, to be followed next by more chaste patterns resembling "makiye" figures.

From about 1918 taste demanded a change of an opposite character. Grandeur was now the predominating mark in popular designs in which both European and Oriental styles were used side by side. Patterns after Western flowers were now most in demand in the former, and this novelty still holds the field. One thing that is noticeable about the later changes is that the shading off of hues is conspicuous in designs for ladies' garments, they being shown higher up on the skirt, even up to the shoulder, in utter disregard of the rules of symmetry and convention. It must be remembered that for Japanese designers the only deter-

mining factor for devising new designs is the dictates of good taste, within the wide limit of which they can allow their fancy or whim fullest play, and with the audacity and freshness of almost pristine artists.

MUSIC

Music in Japan exists in two distinct forms, one of them Japanese music handed down from old Japan, and the other Western music which was introduced from Europe and America after the Restoration of Meiji. Until about ten years ago these two often appeared together on the program of same concert, but of late they have become separated. There are therefore two sorts of music lovers, one favoring the traditional native music and the other patronizing the Western. Generally speaking, students and other young men prefer the latter.

The indigenous music may be classified into three kinds. The first is called the "gagaku," or elegant music, brought from China and India about 1,000 years ago. It consists of a large orchestra with extremely complex harmony and is one of the most advanced styles of a formal music. It has long vanished from among the people and is retained only as a classical ceremonial music at the Imperial court. But of late some earnest students of music have commenced researches as to its artistic merit and there is a sign of its revival. Mr. H. Eichhelm of America during his stay in this country in 1920, listened to this music played at the Imperial Household Dept., and was struck so much with its high artistic value that he carried home with him a small piece entitled "Etenraku" and presented it at the Boston Symphony Orchestra in the spring of 1922.

The second kind is vocal and is called "uta" as an accompaniment to the "no" dance. Originated in the time of the Ashikaga Shogunate more than 500 years ago and a favorite pastime of the "samurai" class in the feudal period, it has lately become less exclusive and is now very popular among all classes of gentlefolks. Many of the lovers of "uta" are so prejudiced in its favor that they disdain to lend a kindly ear to any other form of music. It is a cult for them.

The third is comprehensively called the "zokugaku," or people's music as distinguished from the aristocratic "gagaku" or "uta" and has developed among merchants and tradesmen. The most common form of it is vocal with accompaniment of a stringed instrument called "samisen," which originally came from the Luchu Islands 250 years ago. The "nagauta" is one of the most popular tunes of all and is widespread among all classes of women. Other varieties of "samisen" songs are practically professional and among their performers are "geisha" girls. The "koto," or lyre, is chiefly taught by blind musicians to daughters of respectable families. The "shakuhachi," or bamboo oboe, and "biwa," or lute, are played by young people.

As regards Western music in Japan a singing lesson was first included in the curriculum of common education by Mr. Mason in 1879, while the Tokyo Academy of Music, the only Government institution of the kind, was till recently the sole centre for introducing more artistic forms of European music such as piano,

violin and orchestra. Graduates of the Academy, upwards of 1,000, have contributed much to popularizing the exotic music. But it was after the outbreak of the European war, when the foremost artists fled to America, that the Western music has attained a marked development. Since 1920 foremost violinists of the world such as Piaastro, Elman, Zimbalist, Haifetz and Mogullewsky, and other great virtuosos, such as Sykora (cello), Schumann-Heinck (soprano), Hollmann (cello), McCormack (tenor) and Boshko, came over to this country and their exquisite performances were highly appreciated by lovers of music in Tokyo, Nagoya, Osaka and other large cities. The impressions made on the mind of young Japanese were especially profound and have aroused a great enthusiasm for Western music among them. There are many enthusiastic young students and critics of music who attempt through newspapers and magazines to enlighten both in theory and history the lovers of Western music. It is significant to record that in 1922 alone 7 or 8 new magazines devoted exclusively to Western music have been started, while on the other hand lectures on the subject are given very frequently at several important centres.

The use of gramophones too has come into vogue, there being an enormous demand for Victor, Columbia and Brunswick records, mostly of high artistic nature.

Meanwhile the manufacture of the home-made gramophones and records has attained a marked development, partially actuated by the decline of the demand for foreign products, the customs duty on the imports having been raised to 100 per cent. ad valorem since 1922.

With the growing popularity of European music a movement for forming a new national music has been started and is gaining ground. It aims at the reconstruction of old Japanese music on the basis of the Western so as to satisfy the craving of the rising generation in this particular direction. Such talented composers as N. Moto-ori and M. Miyagi are taking a leading part in this movement.

CHAPTER XIX

SPORTS

INTRODUCTORY REMARKS

Till only a few years ago sports were generally considered in Japan as a students' pastime for giving relief to their redundant energy, but this fallacious notion no longer holds. Sports are now a part and parcel of the daily life for young people of all classes. However, the public do not yet possess a clear conception as to the distinction between amateur and professional sports, and it is imperative that they should be properly educated to get rid of their ignorance. The Japan Amateur Athletic Association, the central organ of sports in Japan, has taken upon itself this important task, believing that for the healthy development of sports in Japan the rising generation should be strongly inculcated in the spirit of amateurism and people at large should be taught to treat it with sympathy, if not with enthusiasm.

So wide spread is the love of sports among our students that a higher school of any pretension, especially private, maintains its own well-equipped stadium. That of Kelo and Waseda is of international fame as an arena where the native and visiting, generally, American, teams contest for honor. The latest addition is Meiji Shrine's Stadium constructed in 1926 at the cost of over ¥700,000 and capable to accommodate 30,000 spectators.

1. NATIONAL SPORTS

For judo and fencing see "Physical Culture," Chapter on Education.

Wrestling

The sumo or wrestling may properly be called the national game of Japan, it being popular among all classes of people. It is also a very ancient game, for annalists say that the first bout on record took place as early as 23 B.C. The martial spirit that ruled the land during the long period of feudalism was naturally propitious for the spread of this manly sport. In the time of the Tokugawa many of the great daimyo kept their professional champion wrestlers. For some while after the overthrow of feudalism it suffered decadence, but soon recovered popularity, though at present not so prosperous as before. The Tokyo Professional Wrestlers' Association possesses an amphitheatre at Ryo-goku, Tokyo, capable of accommodating 13,000 persons. Tokyo and Osaka are two headquarters of the game where there are some 200 professional wrestlers. They are classified into nine grades of which only those of the first two or three, numbering in all ten, occupy the front rank. Grand matches are given twice a year, January and May, ten days on each occasion, according to

the time-honored custom observed since 1828. For convenience of this public display, the wrestlers are divided into two opposing "camps," eastern and western, and each wrestler is pitted with one on the opposite side, till the whole ten in the rival camps have gone through the matches in the prescribed ten days. There are two grades of champions, namely the Yokozuna (who alone is entitled to hang round his waist the honored straw festoon) and next the San-yaku (or Three services which are the O-zeki, Sekiwaki and Komusubi). Then follow the sixteen wrestlers collectively called Maegashira and as these are entitled to sit within the curtain, their grade is also called Makuno-uchi. After them comes the Makushita or "below the curtain." The wrestlers in the first three grades and 10 in the four are allowed a share of profit which the promoters of the semi-annual matches, usually the Wrestlers' Association, realize. The Association is composed of retired champion wrestlers, limited to 80 in number, wrestlers on active service ("within curtain" rank) and umpires. The Yokozuna and the Three services receive from the Association on occasion of retirement a sum not exceeding ¥1000. The regular income of wrestlers is very small, for the salary they are allowed for the semi-annual matches does not exceed ¥30 or so each. It is on account of the share they are allowed in the profit of the Association and especially of the gifts they receive from their regular patrons that the wrestlers are able to maintain themselves. Wrestlers indeed are admitted from former times as pets of society, and certainly their simplicity and disinterestedness as compared with more artful and worldly actors make these big boys well suited for appealing for such special treatment. The itinerant tour through the provinces wrestlers undertake twice in a year also brings them fair profit. The traditional tricks and dodges of wrestlers number forty-eight based on the fundamental "hand," viz., nage (to throw), kake (feet entangling), hineri (to twist) and sori (to uplift). In practice, however, tricks as used on the ring number some two hundreds.

The Tokyo and Osaka Wrestlers' Associations were amalgamated into one combined body in January '27 and the semi-annual tournaments are held both in Tokyo (Jan. and May) and Osaka (Mar. and Oct.). The foremost champion wrestlers on the ring of the Association, composed of the wrestlers of Tokyo and Osaka, are as follows:—

Eastern camp	Age	Weight	Height
		Kan (3.75 kg.)	Shaku (11.93 ins)
Tunenohana (Yokozuna)	32	32.0	6.0
Hitachiwa (Ozeki)	28	29.5	5.7
Dewagatake (Sekiwaki)	26	45.5	6.6
Wakabayama (Komusubi)	33	28.0	5.8
Western camp			
Miyagiya (Yokozuna)	34	33.0	5.8
Onogawa (Ozeki)	35	32.0	6.0
Kiyosegawa (Sekiwaki)	36	26.0	5.7½
Manazuru (Komusubi)	27	30.0	6.8

Professional wrestling has lost much of its popularity of late years owing too often to doubtful practices. On the other hand, amateur wrestling is steadily gaining favor among boys of collegiate or even secondary schools and their champions meet several times a year at either Tokyo or Osaka to contest the

championship. In the 9th annual matches of Kanto students held in Tokyo in May, '28, Waseda, Kelo, Rikkyo and Meiji Univ. champions distinguished themselves in the ring.

Horse Riding and Races

The art of horse riding as a means of culture is quite secondary in Japan, being confined only to high and special classes. Horse racing that declined with the prohibition of pari-mutuel tickets in 1908, revived prosperity with the permission of the betting system under strict restriction in 1923. The Government is encouraging racing by granting aids. Ten race clubs exist, as Hanshin at Naruo, Tokyo at Meguro and Nippon at Yokohama, etc. There are 8 others in the provinces, races being held semi-annually, viz., in spring and autumn.

In the autumn races of 1926 there were altogether 151,878 admissions, prizes awarded amounted to ¥800,541, tickets sold ¥11,877,000 and amount distributed ¥9,698,000.

The fastest records in recent years are as follows:—

Country Bred

Year	Race at	Distance	Horse	Mfn.	Sec.
1922	Naruo	1 m.	Cherry Blossom	1.	42. 53
1925	Sapporo	2 m.	Koiwai	3.	32. 06

Foreign Bred

1910	Yokohama	1 m.	Dorothy	1.	45. 70
1914	Tokyo	1½ m.	Chishima	1.	40. 57

With the general growth of interest in sports horsemanship has also gained some popularity among the public, especially college students and even women. There are at present about 15 equestrian clubs in larger cities while many universities and collegiate schools have their students' societies for horse-riding.

In the elimination contest held at Narashino in May, 1927, for the 9th International Olympic horse race to take place at Amsterdam in August 1928, Lt.-Col. K. Yusa, Major K. Okada, Major S. Kido and Captain S. Yoshida, all instructors of the Cavalry School at Narashino, were honored with selection.

Swimming

The art of swimming had a special and ancient course of development in Japan, producing many schools of swimmers. The different styles and strokes of the famous swimming masters of the past are, to some extent, perpetuated and taught at swimming schools to be found in all parts of the country. In the summer holidays swimming schools are held by universities and schools, which give regular courses of instruction to students in the art of swimming. In some parts of the country trick swimming is practiced, and interesting competitions are often held. For example, the swimmer is expected to tread water so steadily as to enable him to hold a fan in his left hand and paint a poem upon it with his right hand. Still more spectacular is the mil-

tary drill and target practice in deep water. It is performed with an ordinary army carbine. The swimmer is expected to aim, fire and reload his rifle, while steadily swimming with the tread stroke.

All Japan Swimming Championship Meet:—This is held annually by the Japan Aquatic Sport League which was organized in 1925. The third meet took place at Tamagawa pool in Tokyo on July 30-31, 1927, with the following results:—

Distance			Time	
100 m.	free	style	1'6.4"	Mori (Waseda Univ.)
200 m.	"	"	2'17.2"	Takaishi (Waseda Univ.)
400 m.	"	"	5'17.6"	Arai (Waseda Univ.)
1,500 m.	"	"	21'47"	" (" ")
100 m.	back	stroke	1'27.6"	Kimura (Waseda Univ.)
200 m.	breast	stroke	3'1"	Tsuruta (Hochi)
200 m.	relay		1'56.2"	{ Matsuno, Sata Ebihara, Muramatsu } (Meiji Univ.)
800 m.	relay		9'59.6"	{ Takaishi, Mori Arai, Yoneyama } (Waseda Univ.)

Another noteworthy annual contest was that held in August '27 at Hamamatsu and promoted by the Hamana Bay Swimming Association, ending in a victory for the Hamana Ass'n. which carried off 20 points, followed by the Butoku-kai of Kyoto with 10 points.

In August '27, Japanese champions, Takaishi, Kimura, Arai, Sata and Tsuruta, went to Hawaii and participated in the all-American aquatic sport contests held at Waikiki, Honolulu, for 4 days. The Japanese came out 3rd in the contests with a score of 14.

Further on October 1-2 a Pan-Pacific swimming meet was held at Tamagawa pool, Tokyo, under the auspices of the Hochi Shimbun, the game being contested by the Japanese, American and Australian champion swimmers. The contests resulted in the victory of Japanese who scored 55 against 41 of Americans and 3 of Australians. The record follows:

Event			Winners	Time
100 metre	free	style	Takaishi (Japan)	59 6"
200 metre	breast	stroke	Tsuruta (Japan)	2'57 8"
1,500 metre	free	style	Crab (America)	21'59"
200 metre	back	stroke	Irie (Japan)	2'51 2"
400 metre	free	style	Takaishi (Japan)	5'05"
200 metre	free	style	Takaishi (Japan)	2'17 4"
100 metre	breast	stroke	Tsuruta (Japan)	1'19 4"
800 metre	free	style	Crab (America)	10'14 4"
100 metre	back	stroke	Rowfer (America)	1'12 6"
800 metre	relay		Americans	9'38"

Scores: Japanese 55; Americans 41; Australians 3.

Speed Swimming Official Records

Event	Time	Year	Holders
50 m. free style	26.8"	1925	K. Takaishi (Waseda Univ.)
100 m. " "	59.4"	"	K. Takaishi (" ")
200 m. " "	2'16.3"	1926	T. Satake (Waseda Univ.)
400 m. " "	5'3.4"	"	K. Takaishi (" ")
800 m. " "	10'48"	"	K. Takaishi (" ")
1,500 m. " "	21'18.4"	1927	N. Arai (Waseda Univ.)
100 m. back stroke	1'15.2"	"	R. Kimura (Waseda Univ.)
200 m. breast "	2'57.2"	1926	Y. Tsuruta (Saseho)
200 m. relay	1'52"	"	{ Nishimoto, Okada, } Takaishi, Okuno } (Toyeikai)
400 m. "	4'22.3"	1927	{ Kanamori, Okuno } Iriya, Takaishi } Ibaraki S.C.
800 m. "	9'38.2"	1926	{ Noda, Sada, } Arai, Takaishi } (all Japan)

Mountaineering

Mountaineering as a pious act of religious people is an ancient custom among the Japanese, but it is only within ten years or so that the practice has begun to appeal to the sporting sentiment of those who are inclined to test their sturdy legs and power of endurance. The example was first set by foreigners.

Sacred peaks visited by mountain pilgrims are found almost everywhere in the country, but of these the most popular are Fuji, Ontake, Tateyama, etc.

Fuji (12,387).—Climbing this peak is lately one of the most favorite summer pastimes among people of both sexes and almost of all ages, for Fuji, though the highest in Japan proper, is the easiest to ascend, and also in the season best provided with accommodations and facilities. Even a post office is opened then. There are five regular paths leading to the summit, viz., Omiya-guchi (about 20 m. to top), Gotemba-guchi (20 m.), Subashiri-guchi (13 m.), Suyama-guchi (18 m.) and Yoshida-guchi (18 m.). The first four lie along the Tokaido railway while the last is approached from the opposite side.

Japanese Alps.—Though, according to authentic information, the name was first proposed by Prof. W. Gowland when Sir Ernest Satow compiled in 1872 Murray's Hand Book on Japan, this distinction is popularly attributed to the Rev. Walter Weston, an English mountaineer, member of the Alpine Club, London, and first Honorary Member of Japanese Alpine Club, in christening the mountain ranges extending from the Pacific to the Japan Sea, the broadest region of Honshu that comprises the provinces of Hida, Shinano, Mino, Etchu, Echigo and Kai, lying approximately between 35°-37° N. and 137°-139° E. The Japan Alps are commonly divided into three groups, viz., Northern Alps, Central Alps, Southern Alps, as follows:—

Name of Mts.	Height (feet)	Nearest Railway Station
Northern Alps:		
Shiro-uma (Ohrenge)...	9,623	Akashina via Omachi
Yarigatake	10,483	Matsumoto; Akashina

Name of Mts.	Height (feet)	Nearest Railway Stations
Hodaka	10,139	Matsumoto
Oku-Hodaka	10,181	"
Kita-Hodaka	9,951	"
Jonendake	9,358	Akashina
Otenjodake	9,585	"
Tsubakurodake	9,063	"
Arlake	7,440	"
Tsurugidake	9,836	"
Suishodake	9,770	"
Yakedake	8,052	Matsumoto
Kasagadake	9,502	Matsumoto; Gifu (via Taka- yama)
Tateyama	9,816	Ashikura (via Toyama)
Norikuradake	9,928	Matsumoto

Central Alps:

Ontake	10,050	Kisofukushima
Kiso-Komagatake	9,698	Miyanokoshi; Tatsuno
Ena	7,224	Nakatsu

Southern Alps:

Kai-Komagatake	9,731	Kobuchizawa; Hinoharu; Fuji- mi
Ho-o	9,086	Kobuchizawa; Hinoharu
Jizo	9,000	" ; "
Nokogiridake	8,856	" ; "
Senjogatake	9,951	Chino or Tatsuno
Akaishidake	10,236	" "
Shirane-Kitadake	10,473	Kofu
Shirane-Ainotake	10,463	"
Uwonashi-Kochidake	10,112	"
Arakawadake	10,114	"
Shlomidake	10,000	"
Shirane-Nodoridake	9,929	"
Hijiridake	9,878	"

Of the three groups the northern one is most popular, being comparatively easy of access and also on account of several thermal springs existing in the valley, such as Kamikochi (5,000 ft. above sea-level), Nakabusa (5,000 ft.), Shirahone (4,000) and Hirayu (4,000). In richness of flora, also, the group surpasses the other two, for it is understood that about two-thirds of the alpine plants existing in Japan are contributed by it. The flower-carpet on Mt. Shiro-uma (also called Ohrenge) are especially conspicuous. The Northern Alps contain two active volcanoes, Yakedake and Arlake.

Mountaineering and Exploration

Peak-hunting is no longer the main object of mountaineering in Japan; it is now chiefly directed to the more serious aim of exploring little known valleys and river sources as also of scenes of rare physical beauty. At first this exploration was confined to summer time, but since 1921, by calling in the help of skill, the explorers have in the winter season extensively covered Shiro-uma, the Tateyama range and other peaks.

First Climbers of Canadian Rockies

In June 1925 a Japanese Alpinists' party of six led by Mr. Maki went over to America on an exploration of the Canadian Rockies and succeeded on 21 July in scaling Mt. Alberta, one of the highest and the most rugged peaks in the group, hitherto defying all human attempts to climb it. They also ascended Mt. Wooley and other peaks in the range. Mr. Maki is one of the foremost alpinists of Japan who scaled the east peak of Mt. Elgar in the Central Alps some years before.

Organization and Publications

Beginning with a modest start in 1905 of a small group of enthusiastic mountain-climbers, such as Messrs. N. Takasu, K. Kojima, R. Takano and K. Takeda, the Japanese Alpine Club, the only authoritative organization devoted to mountain exploration in Japan, now consists of some 800 members, publishing its quarterly organ the "Sangaku" (Mountains). Office at 36 Sendagi Komagome, Tokyo; 7 secretaries and 14 advisers. Indeed so universally has this daring pastime spread during the last ten years that there is now practically no high mountain or no hidden valley that has not been explored. For foreigners desirous of having general information about Japanese mountaineering the following publications are recommended:—

"Murray's Handbook of Japan, 9th edition"; Official Guide-book of Japan, vols. 2 & 3; Japanese Alpine Club Journal "Sangaku," English Supplement; Mr. H. E. Daunt's Journal "Inaka"; Mr. W. Weston's "Exploration of the Japanese Alps" and "Playgrounds of the Far East."

2. WESTERN SPORTS INTRODUCED

Apart from fencing, judo, wrestling, swimming, archery, and other indigenous forms of physical culture, there are other sports which were introduced from Europe and America some half a century ago and which are now even more popular than those of native origin among our young people. Of these Baseball, Football, Tennis, Golf, Track and Field Athletics, Speed Swimming, Rowing, Mountaineering, and Winter sports have particularly acquired a wide vogue.

Baseball

Among the Western sports introduced stands pre-eminent the game of baseball which is played by all classes of students, including primary school children as well as college students. It was about 40 years ago that a baseball team was first formed by the officials at Shimbashi Station, though to be more accurate the American professors who were engaged in 1876 for the newly created Sapporo Agricultural Coll. (now Hokkaido Univ.) first introduced the game into Japan. The victory won by the First High School team against an American nine in 1898 led to the speedy popularising of the game throughout the country. This was, however, a local affair. The visit which Waseda Univ. team made to America in 1905, was far more important. The expedition could not score any great success but was fraught with great consequence. In fact the game was revolutionised

and the two Universities of Waseda and Keio became champion teams in the country. In 1907 the Keio University invited the St. Louis team of Hawaii. The matches played with the team demonstrated the fact that Japanese students had much to learn before they could cope with the visitors. Since then the Waseda and Keio teams and those of Washington, Chicago and Indiana Universities have frequently exchanged visits, the arrivals now and then of American professional teams further adding to the zest of the game. With the creation of the Hosei Team, a University league was formed in 1918 among the Keio, Waseda, Meiji, Rikkyo and Hosei (all private Universities in Tokyo) and matches are now played between them every year. In the autumn of 1925 the Imperial University team formally joined the league, while the restoration of the Waseda-Keio tournament in spring of the same year after the prolonged suspension added to the interest of the league matches, making them the centre of fans' keen attention throughout the country.

It may be noted that the game has spread not only among higher and middle school boys and even elementary school pupils, but also among clerks of business houses and companies as well as government employees. Some of the latter have very strong teams, including as they do many graduates of higher schools and universities who had their days as college players.

Outside the university league there are other bi-annual games which attract crowds of fans, i.e. those between the Mita, Tomon and Sundai clubs organized by the old boys and undergraduates of Keio, Waseda and Meiji universities respectively.

Among other annual events may be mentioned the middle and higher school championship games. In the former held in August, 1927, the Takamatsu Com. Sch. team won the final. The higher school championship went to the Kansai Univ. Prep. School nine, which defeated the Yamaguchi Higher Commercial School team in the final held on the Meiji Shrine grounds (Tokyo) on July 29-30.

University League Results for Spring, 1928

	Won versus					Total won	Pct.
	Waseda	Rikkyo	Meiji	Hosei	Imperial		
Waseda	—	2	0	2	2	6	.750
Rikkyo	0	—	0	2	2	4	.500
Meiji	2	2	—	2	2	8	1.000
Hosei	0	0	0	—	0	0	—
Imperial	0	0	0	2	—	2	.250
	Waseda	Rikkyo	Meiji	Hosei	Imperial		
Plyd	8	9	8	9	8		
AB	297	309	267	300	282		
R	85	29	39	23	34		
H	98	74	70	51	75		
2B	18	11	6	6	8		
3B	10	3	11	2	2		
HR	1	1	1	0	1		
SH	10	12	10	8	10		
SB	21	5	9	11	17		
SO	18	34	20	40	30		
BB	47	27	36	25	25		
Pct. ....	.330	.239	.262	.170	.286		

Japanese-Foreign Tournament Record

Tournaments between the Japanese College teams and foreign teams from spring of 1927 to autumn of 1928 either in Japan or elsewhere may be shown in a tabular form as below:—

Name	Date	No. of matches	Score
Fresno Japanese	April '27	42	+37
California University	May '27	12	+ 4
Waseda American Campaign.....	April '27	27	+15
Kelo Manchuria Campaign.....	July '27	6	+ 6
Hosel " "	" '27	11	+ 7
Kelo American Campaign.....	April '28	39	+24

Football

Though it is already more than twenty years since Rugby and Association foot-ball was introduced into Japan, the game is not yet so popular among the public as baseball. This may chiefly be due to the fact that their interest is too much centred on baseball and that there has been no central organ for its diffusion and development.

Association Football.—In February 1918 the first Association football matches were played both in Kanto and Kansai districts. Perhaps as a result of the presence of the then British Ambassador Sir Conyngham Greene at the Kanto matches, a silver cup was presented in March 1919 by the Football Association in England to the Japan Football Association, which latter, however, did not come into existence until October 1921 when it was organized in Tokyo with Mr. J. Imamura as president and Prince I. Tokugawa and the British Ambassador as honorary presidents. With the formation of the Association the National Championship Game was started. It is played in October and November every year and the English silver cup is competed for. Other important annual events are the championship game of colleges and universities and that of high schools.

Rugby Football.—This old English game was first taught to Kelo students by Mr. G. Tanaka who studied at Cambridge. The first match was played between Kelo students and British residents in Yokohama and Tokyo about twenty years ago with Mr. Tanaka as referee. About 1907 a Rugby football team was formed in the 3rd High School and the Doshisha, both at Kyoto. Since then inter-school matches have been played every year between these two and Keio. At present Waseda Univ., Tokyo and Kyoto Imp. Univ., Osaka Higher Com. Sch. and many middle and higher schools have a Rugby team. In the annual all-Japan Rugby championship contest held in January, '27, the final tournament between the Waseda Univ. and the Kelo Univ. teams resulted in a draw. In July '27, the Waseda Univ. Rugby team went to Australia to play a series of matches with Australian teams, but of course the Waseda boys were badly beaten by their better trained adversaries.

Lawn Tennis

The soft ball practice that had long been in vogue in Japan has of late begun to be displaced by the hard, or regulation, ball

system now widely adopted in Western countries. Soft ballers, however, still hold their own, and there are two rival soft ball associations with members of both sexes. The growing popularity of the sport among the fair sex is really a sign of the times. In the 6th Far Eastern tournaments, for instance, both the male and female teams of Japan came home triumphant. The 1927 record was:—

Name Singles:	Represent	Name Doubles:	Represent
Abe	Tomon	Abe-Fukuda	Tomon
Ishii	Kelo	Sato-Kobayashi	Matsuoka
Aoki	Mitsubishi Co.	Yokota-Fujie	Meiji

So far as regards international fame, lawn tennis may be called one of the most advanced of the Western games popular in this country, for Japan can boast three players of world wide fame, Kumagai, Shimizu and Kashio, who participated in the Davis Cup Tournament in 1921, the former two challenging the holders of the Cup, the U.S. team. Though they did not come out first in the final their excellent skill and sportsmanlike spirit won admiration in America, while their activity in the international matches gave stimulus to players at home. In the competition for 1927 Japan was represented by Harada, who stood 3rd in the U.S. 1927 ranking for singles Japan, represented by Harada, Ohta and Toba in the American zone tournaments for 1927 Davis cup, defeated first Mexico and next Canada, but in the final contest, she was beaten by France.

In 1925 the Japan Lawn Tennis Association undertook for the first time the ranking of Japanese tennis players. Those who lead the list for 1928 are as follows:—

Singles:—1, Abe (Tomon); 2, Ishii (Kelo Univ.); 3, Aoki (Mitsubishi); 4, Miki (Ataka); 5, Makino (Tokyo Univ. of Commerce).

Doubles:—1, Abe-Fukuda (Tomon); 2, Sato-Kobayashi (Matsuoka); 3, Yokota-Fujie (Meiji Univ.); 4, Aso-Yagi (Waseda Univ.); 5, Yamagishi-Shimura (Kelo Univ.).

Golf

This dates in Japan from 1907 and there are no less than 10 clubs, i.e. Tokyo Golf Club, the Hodogaya Golf & Country Club, the Golf Association of the Nippon Race Club, the Kobe Golf Club, and one each at Naruo, Tarumi, Nagasaki, Unzen, Seoul and Dalren.

Every spring contests for either Club or inter-club championship or for special prizes are held by those clubs. But this game is not spread so wide as baseball and tennis, it being played here chiefly by the moneyed classes, and not yet popular among students.

Basketball

Basketball had a hard struggle to get a start in Japan, and it was not until the fall of 1921 that a tournament was run off in connection with the annual track and field championships, four teams responding, all from the Y.M.C.A.'s of Tokyo, Yokohama, and Osaka.

Since then this sport has rapidly spread in the provinces, especially among girl students. At the inter-collegiate contests held in Tokyo between Nov. 12 and Dec. 4, 1927, the Tokyo Commerce College, Waseda and Rikkyo Univ. teams came first with the same score of +8 and -2. The result of the all-Japan high school contests held under the auspices of the Tokyo Imp. Univ. on July 27-29, 1927, in Tokyo, was in favor of the Tokyo High Sch. team, which won both final and semi-final with the scores of 40-22 and 22-16.

Volley-Ball

Volley-Ball came to Japan hand in hand with Basketball, and is now quite popular among school girls. The National Championship games are held annually. At present the Kobe High. Com. School holds the honor. Girls' championship games also take place yearly. In the 1927 contests held in Osaka in July the championship was won by the Kobe 1st Girls Sch. team which was honored with the privilege of representing Japan at the Far Eastern Olympic held in Shanghai in August.

Hockey and Cricket

Hockey.—This Western game is of the latest introduction in Japan, and it was only in November, 1926 that the first national championship tournament was held, when the Waseda team came out first in the final. In the spring of 1927, the league of the Kanto students hockey teams was organized and in the first contest the Waseda boys also won victory.

Cricket is not yet popular and is played chiefly by foreign residents.

Rowing

The purchase of some boats by the Tokyo Imperial University from the Admiralty about the year 1880, marks the beginning of the sport. At present it is almost universally practised by students of all schools of middle and higher grade that are favorably situated for the purpose. In this connection the services rendered by the young Englishman, Prof. Strange, who at that time taught English in the Preparatory Course of the University, in nursing the infantile rowing and other athletic sports are gratefully remembered by those of his old boys who are still alive. The Sumida river in Tokyo, the Seta and Lake Biwa, both near Kyoto, are regular scenes where students of the higher institutions in Tokyo and Kyoto contest the championship in spring or fall every year.

The adoption in 1920 of the international standard boat with eight outrigger sliding seats at the instance of Dr. S. Kishi, (of Tokyo Bar), an influential member of the Tokyo University regatta department, revived this sport which had lost much of its interest. To place rowing matches throughout the country under a uniform system, the leaders of all the higher institutions interested in the sport organized in that year the Japan Amateur Rowing Association with Dr. S. Kishi as chairman.

The 7th Inter-collegiate race participated in by 12 crews was

held on the river Sumida on Sept. 24-25, 1927; course 2,000 metres. In the final race between the two champion crews of Tokyo Commercial Univ. and Meiji Univ. the former won by 7 lengths, time 6'46"—7'20". Of the other notable events may be mentioned the high school regattas held on the Setagawa on July 31, in which the Matsuyama High Sch. crew won over the Matsuyama High. Sch. by 3 lengths; and then the 1st High Sch. and 3rd High Sch. contest on the Sumida on Aug. 21, when the former won by 4½ lengths, time being 10'—10" (course 1½ miles).

Winter Sports: Skating and Skiing

As many outdoor sports in winter appealing to those who are lovers of nature, skating and skiing have recently become very popular at all places affording good slopes.

Skating is no novel sport in Japan. From olden times the frozen streets in towns and villages of north-eastern Japan have provided for the boys skating grounds over which they sped to schools or on errands, wearing straw sandals with a piece of bamboo secured underneath.

The regular skating dates some thirty years back and was introduced by foreigners, but skating as a sport for the general public was created only about 1907 on Lake Suwa, an inland basin 12 miles in circumference and about 40 miles north-west from Tokyo. The shores abound in hot springs, though of little medical value. Every year about the beginning of Feb. is held a regular contest participated in both by Japanese and foreigners. Lake Shoji at the north-eastern foot of Mt. Fuji, and Lake Haruna, some 5m. up from Ikao Spa, are other good skating grounds easily accessible from Tokyo. The most notable events in this branch of sport in 1927 were the 6th championship meet held on Jan. 30 at Kamisuwa as promoted by the Japan Skating Association and the inter-collegiate championship meet which took place at Lake Matsubara on Feb. 13.

Skiing was introduced about 1910 by an Austrian officer attached to a Japanese Regiment in Takata, Niigata-ken, one of the most snowy districts in Japan. It has subsequently become a popular sport in Niigata, Yamagata and some other districts where at present even school girls very much enjoy it. The favorite skiing slopes as they exist at present are Mt. Myoko (8,180 ft.) situated on the borders of Niigata and Nagano prefectures and reached in about 10 hrs. from Tokyo, with Akakura and Seki hot-springs at the foot, where tolerable hotel accommodations are available at both places and Taguchi, a little town close to the railway station of the same name. Goshiki (3,300 ft.) is another hot-spring skiing ground about 2m. up Mt. Azuma situated close by Itaya station on the O-u Main Line. It is about 10 hrs. from Tokyo. Numajiri at the foot of Mt. Bandai was chosen by the Waseda Ski Club in 1923 as its training ground. It is about 8 hrs. away from Tokyo and can be easily reached by a night train from Uyeno. Within an easily accessible distance from Tokyo are found good skiing grounds at Subashiri, Karuzawa, Haruna, Iiyama, Nakano-sawa, Fukushima-ken and Nikko. For skiers in the Kyoto-Osaka district Mount Ibuki standing near the shore of Lake Biwa offers a good course.

Aomori, Otaru, Sapporo, Niigata have each a ski club, and there are also the Tokyo Ski Club, the Ski Dep't of the Japan Amateur Athletic Ass., the Kansai Ski Club at Osaka, etc. Most of the higher institutions have their own ski departments whose members practise every winter in the northeastern and the Shin-yetsu districts, though they have not yet advanced to the stage of dual meet.

The 6th all-Japan championship contest was held on Feb. 4 and 5, '28, on the slope of Mt. Sankaku, Sapporo. Champions representing Hokkaido district won in most events. Principal records were as follows:—

15 km.	1°10'51"	Nagata (Hokkaido Imp. Univ.)
30 km.	2°37'30"	Kuriyagawa (Sapporo Rly.)
Jumping	(18.318 points)	Kamizawa (Hok. Imp. Univ.)

Track & Field Athletics

In the history of Japanese athletic sports the year 1922 will stand out prominent for the honor extended by the Prince Regent and also by the Prince of Wales, then on a tour to this country, to the Japan Amateur Athletic Association that was organized in 1911 with the object of encouraging amateur athletic sports in order to ensure the proper development of national health. The two distinguished patrons each presented a cup to the Association, and these with other trophies are competed for at the Meiji Shrine Annual Games. The track and field athletics have made a remarkable development in the past few years, forming an important feature in the above-mentioned meet and various other annual games. Regular contests also take place between many universities as well as higher and middle schools. In February 1925 various local bodies organized the Japan Track and Field Athletic League to promote further progress of this branch of sport.

Although Japanese athletes cannot yet match Western champions, it is evident that they are steadily coming up to the latter's level. Already Mr. Miki of Kelo University has attained the world's record in 200 m. low hurdle and Miss Hitomi in standing high jump and hop, step and jump.

Miss Hitomi who participated in the 2nd Women's Olympic Games held in August 1926 at Gothenburg made excellent record, joining in half a dozen events and winning in running and standing broad jumps. By all herself she gained 15 points, placing Japan 5th in the final standing, and was awarded the honorary prize of the Women's International Athletic Federation.

All Japan Track and Field Official Records

(Published May 1928)

Events	Time or dist.	Year	Holders
100 m.	107."	1927	I. Aizawa (Kyoto Imp. Univ.)
200 m.	21.9"	"	(M. Takaki (Yamagata High Sch.)
			I. Aizawa (Kyoto Imp. Univ.)
400 m.	50.2"	1925	T. Nando (Tokyo H. Norm.)

Events	Time or dist.	Year	Holders
800 m.	1'53.6"	1927	Y. Kuwada (Teacher)
1,500 m.	4'7"	"	K. Tsuchiya (Nihon Dental Col.)
5,000 m.	15'40.5"	1926	T. Nagatani (S. M. Rly)
10,000 m.	32'11.8"	1925	" (Meiji Univ.)
Marathon	2'36'10"	1924	S. Kanakuri (Teacher, Tokyo Girls' Norm. Sch.)
Low hurdle (200 m.)	24.3"	1926	Y. Fukui (Tokyo H. Norm.)
High " (110 m.)	15.3"	1927	Y. Miki (Keio Univ.)
400 m. relay	43"	1927	Waseda Univ. { Inuma, Nambu Oda, Osawa }
800 m. "	1'30"	1925	All Japan { Someya, Oka, } Tani, Tajiri }
1,600 m.	3'25.3"	"	All Japan { Ogawa, Tanaka, Matsushige, Nando }
Running broad jump	7.377 m.	1927	M. Oda (Waseda Univ.)
" high "	1.92 m.	1927	" "
Hop, step & jump	15.355 m.	"	" "
Pole vault	3.90 m.	"	Y. Nakazawa (Tokyo H. Norm.)
Discus throw	41.465 m.	1927	Y. Fujita (Yokohama H. Tech. Sch.)
Javelin throw	57.045 m.	1927	G. Koyama (Keio Univ.)
Shot put (16 lb.)	13.399 m.	"	S. Mizokawa (Kyoto)
Hammer throw	44.84 m.	1927	Y. Okita (Waseda Univ.)
Pentathlon	4,320.6675	"	T. Saito
Decathlon	6,784.265	1926	M. Oda (Waseda Univ.)

Records of Girls

50 m.	6.4"	1927	K. Hitomi (Osaka Mainichi)
100 m.	12.4"	"	" "
200 m. relay	25.5"	1926	Nagaoka G. S. Team.
400 m.	53.4"	1927	Almond team
Running high jump	1.40 m.	"	K. Nagata (Tsuchiura G. S.)
Hop, step & jump	11.16 m.	1926	S. Hashimoto (Hinata G. S.)
Shot put (16 lb.)	9.97 m.	"	K. Hitomi (Womens Athl. Col.)

Meiji Shrine Annual Games

The nation-wide sport meet takes place annually on the occasion of the autumn fete of the Shrine under the auspices of the Home Department. The games cover almost all field of land and aquatic athletics, 60 championships being competed for. They are participated in by nearly 6000 students and others from all parts of the country, and are given at the Meiji Shrine Stadium in Yoyogi. The 4th games were held from Oct. 28 to Nov. 3, 1927.

The Far Eastern Olympic Games

The 8th meeting was held at Shanghai for 8 days from August 27, 1927. The championships of track and field, and baseball went to Japan, while the Filipinos won in speed swimming and basket-ball, and China in football, volley-ball and lawn tennis.

Below are given the results of track and field events and speed swimming:

Track and Field

Events	Open	Winners
100 m.	11" m.	Nepomuseno (Phil.)
200 m.	22.3"	Gonzaga (Phil.)
400 m.	50.6"	Estrada (Phil.)
800 m.	2'1.3"	Y. Kuwada (Japan)
1,500 m.	4'14.1"	H. Tsuda (Japan)
10,000 m.	34'56"	M. Michikawa (Japan)
High hurdle	16"	Rabaya (Phil.)
Low hurdle	25"	Y. Fukui (Japan)
800 m. relay	1'31.2"	Philippine team
1,600 m. relay	3'28.9"	" "
Running high jump	1'93.5	Toribio (Phil.)
Running broad jump	7.07 m.	M. Oda (Japan)
Hop, step & jump	15.355 m.	M. Oda (Japan)
Pole vault	3.675 m.	Y. Nakatawa (Japan)
Javelin throw	56.9 m.	K. Sumiyoshi (Japan)
Discus throw	38.70 m.	Y. Okita (Japan)
Shot put	14.225 m.	Roa (Phil.)
Decathlon	5504	M. Oda (Japan)
Pentathlon	2542	Y. Hoshina (Japan)
Japan.....	138.5	Philippine... 90.5 China..... 8

Speed Swimming

50 m.	27.3"	Ulka (Phil.)
100 m.	1'5.2"	Jakaria (Phil.)
100 m. back stroke	1'18.9"	H. Ueda (Japan)
1,500 m.	22'17.9"	H. Yoneyama (Japan)
400 m.	5'32.8"	S. Murakami (Japan)
200 m. breast stroke	2'52.9"	Idelfonso (Phil.)
200 m. relay	1'53.1"	Philippine team
Philippines....	43	Japan..... 39 China..... 4

Boxing Among Military Officers

On March 17th, 1924, at the invitation of Lieut.-General Ugaki, the then Minister of War, and Major-General Shiraishi, the then Director of the Toyama Gakko, Captain Warren J. Clear, of

the American Embassy, began instruction of a class of forty-five officers and non-commissioned officers in boxing. This was the first occasion the sport received regular training in Japan. Captain Clear's offer to train our officers was voluntary and gratuitous, and for two months this young officer exerted all his energies to develop some capable boxers in our Army and gave this new sport an impetus in Japan. Under his instruction the class made remarkable progress, and on May 17th, 1924, the Japanese Army staged its first boxing-bouts at the Toyama Gakko with marked success for so brief a period of training. Capt. Clear deserves mention in the sporting history of Japan together with that Austrian officer who first taught us skiing.

LEADING ATHLETIC GROUNDS

As existing at the end of Sept. 1927 there were some 40 athletic grounds worth mentioning in Japan proper, and of the number 13 are picked out as follows. All things considered the Meiji Shrine Stadium at Aoyama, Tokyo easily stands first in equipment and so forth.

Name	Locality	When established	Area (tsubo)	Can accommodate	Owner
Tsuna-machi.					
Mita	Mita, Tokyo	Dec. 1900	4,000	15,000	Keio Univ.
1st High School	Hongo, Tokyo	Mar. 1889	6,300	2,000	1st High School
	Totsuka, suburb of Tokyo	— 1902	5,000	10,000	Waseda Univ.
Totsuka	Nagasaki-machi, suburb of Tokyo	Sept. 1925	8,200	13,000	Rikkyo Univ.
Rikkyo Univ.	Yoyogi, suburb of Tokyo	— 1924	10,000	65,000	Meiji Shrine
Meiji Shrine Stadium					Hosan-kwai
Meiji Shrine Base-ball Ground	..	Oct. 1926	7,000	30,000	..
Meiji Shrine Wrestling Ground	..	Oct. 1926	2,500	30,000	..
	Komaba, suburb of To-vo	— 1916	9,000	15,000	Meiji Univ.
Meiji Univ.	Oku-machi, suburb of Tokyo	Nov. 1922	15,000	27,000	Tokyo Base-ball Club
Otsu					
Osaka Municipal Athletic Ground	Hachimanya, Osaka City	May 1923	11,599	40,000	Osaka City
	Naruo, Hyogo Pref.	Aug. 1924	14,000	80,000	Hanshin Electric Railways
Koshi-en					
Kyoto Imperial Univ.	Yoshida, Kyoto City	May 1924	8,000	20,000	Kyoto Imp. Univ.
3rd High School	..	Sept. 1897	36,000	10,000	3rd High School

Waseda University's New Ground.—Waseda University is now constructing a Comprehensive Athletic Ground covering some 30,000 tsubo (25 acres) at a northern suburb of Tokyo, the work to be completed by 1932.

Y.M.C.A. Athletic Hall.—This has been completed at the cost of over ¥200,000 and is open to male applicants. A spacious pool, hand-ball court, running track, etc. are provided in up-to-date style.

CHAPTER XX

AMUSEMENTS

1. THE STAGE ART, DANCE AND MUSIC

The year 1922 marks an epoch in the history of the stage art of Japan, for in the spring when the Mayor of Tokyo invited the then visiting Prince of Wales to a special programme in his honor at the Imperial Theatre, a number of Princes and Princesses of the Blood crossed the portals of a public theatre for the first time in this country. The four one-act plays chosen for the occasion fitly illustrated the immediate precursors of the Kabuki school of acting which combines the techniques of the posture dance play, the puppet rendition of drama, and a peculiar stage art called "No" cultivated by the gentry of the feudal regime. The Minister of Foreign Affairs' hospitality to the Royal Visitor included the performance of a well-known musical play by the leading actresses of the Imperial Theatre troupe, for which a temporary stage and auditorium was built as an extension of the Minister's official residence and the architectural and other designs of the new structure included elements from the Kamakura (seven centuries ago) and Momoyama (three centuries ago) periods. Three leading groups of actors and actresses in Tokyo took part in these entertainments. Their stars and managers have agreed to keep "April 17" for an annual commemoration of the great event. Ever since 1885 when the three famous actors of the time, Danjuro, Kikugoro and Sadanji, performed before the Emperor and Empress Meiji and the Empress Dowager on the temporary stage erected in the private residence of the then Foreign Minister, father of the present Marquis Inouye, class barriers between the court music and dance, the "No" drama and the popular stage art and their patrons or audiences have been in course of gradual removal. The Bureau of Music of the Imperial Household now invites the music-loving public to the semi-annual programme of its classical court music and dances as well as of its modern band music.

Sacred Dance, Court Music and "No" Drama

Our sacred dance is closely connected with the mythological tales, handed down from generation to generation by a class of oral traditionists until they were reduced to writing when the ideographic system was introduced from China and Korea. It is still performed in some Shinto shrines and also as a part of the Shinto rituals on an Imperial court festival day. A sacred song in archaic Japanese is chanted by a Shinto or court-robed musician to the clapping of two flat pieces of wood and to a string instrument called "wagon" or Japanese lyre. This oldest form of our music is familiar to every visitor to the Nikko shrine, the Ise shrines, or the Kasuga shrine at Nara. When the Imperial capital was removed from the last-mentioned Buddhist

Kyoto on April 15, the "No" dance costume and stage-setting are simplicity itself. Only three or four characters including the hero or heroine appear in one piece. They enter and quit the boarded stage with a piece or two of miniature architecture and furniture, by a passage called "bridge". Explanative or descriptive words are sung by a chorus seated on one side of the stage, while the musical instruments used are a flute, a drum, and a large hand-drum and a small one. A character sings or chants his or her own speech as in opera, with slow and stately motions and gestures. It is to listen to a distinguished "No" actor's vocal music, more than to view his manner of acting, that the visitors fill the private theatres owned by different groups of "No" masters who, in their off-stage life, train amateur men and women in singing or dancing according to their traditional canons. Out of the five leading schools of "No" masters, the Hosho's and the Kwanze's are most popular in Tokyo. From the beginning a short *kyogen* or farce was introduced between the two serious pieces to unbend the audience from the emotional tension of a heroic or religious tale. The Imperial Theatre, Tokyo, is contemplating occasional presentation of "No" dramas on its boards for the ordinary theatre-going public.

The Kabuki and Modern Stage Art

While culture and education in general were thus gradually permeating the middle class between the Imperial court and nobility and the common masses, the latter had no amusements or pastimes of their own save such primitive affairs as country dances and ballad singing, until they obtained their musical instrument, the three-stringed guitar called "samisen", some three hundred years ago. Our popular music and stage art owe their origin and development very much to this apparently simple instrument. Some of the songs and tunes of the thirteen-stringed "koto" or lyre, evidently of Chinese origin, which had been the universal instrument played in the upper and middle class families, were adopted or modified by "samisen" musicians. A musical and posture-dance play became then possible. A musical recitation of dramatic compositions also became possible. A stage illustration of a play with puppets, manipulated from behind by the "invisibles," followed, because its explanatory or descriptive text could now be musically recited to the accompanying "samisen", while the words of each character were spoken for the puppet by the same reciter. From puppet acting to human acting it was only a short step. As many of the themes and much of the technique of "No" dramas and puppet plays were derived from the Chinese model of Yuen or Mongol dynasty, so the popular stage art of Japan comprises elements of the posture dance play, the "No" drama and farce, and the exaggerated gestures and the like of the puppet acting. The rise of this Kabuki stage art almost synchronized with the birth of "ukiyoye" or genre-picture, both of which indicated that the masses of people, especially in prosperous commercial cities and towns, had become wealthy enough to demand their own amusements and luxuries through continuance of peace under the last of Tokugawa Shogunate which founded the city of Yedo (Tokyo) about three centuries ago. The Kabuki plays are classified into historical and domestic or social pieces (we do not classify them

into tragedies and comedies, but a comical or fantastic scene is introduced before or after a tragic situation in one play). There is still an exclusively puppet theatre in Osaka, and social plays by the great dramatist Chikamatsu were first staged in that business centre of feudal Japan; grotesque impersonations of legendary or historical heroes were first made on the Yedo stage, for which Moku-ami wrote plays towards the latter part of the Tokugawa Shogunate and at the beginning of the rehabilitated Imperial regime. The main difference between the Kabuki and the modern stage art is that, while more appeal is made to the intellect through the sense of hearing in the latter, the former appeals to imagination through the eye-sight more than to anything else. Successive generations of talented actors, some of whom specialized in feminine roles, have evolved a mass of traditional canons for enunciation, gesticulation, postures and movements of the leading characters of popular, therefore oft-repeated plays. The basic training of a Japanese actor is in posture dance because his actions and poses on the stage must harmonize with the "samisen" music of the Greek-like chorus. The life and thought, costumes and manners of the different strata of our feudal society are graphically illustrated on the Kabuki stage, while skilful color combinations in the costumes, stage architecture and furniture, together with the vocal and instrumental music suggesting a situation or a sentiment, are all calculated to carry the audience (spectators in Japanese) into a land of imagination and romance. (Vide also Chap. Modern Literature. Ed. J.Y.B.)

An element of historical realism was grafted on the Kabuki stock some forty years ago in Tokyo, Dramatist Fukuchi writing a number of new plays for the leading actors of his time. Kawakami and his wife Sada Yacco who made some sensation in their tour through Europe and America started a new grossly realistic school of acting in Kyoto about thirty years ago. They and their troupe took up current events for their staging at first, but on their return from abroad they made another new departure by their successful production of some Shakespearean dramas. For the last ten years or so, both writers and actors have been steadily cultivating the modern European varieties of plays and playing as translations, as adaptations, or in original compositions. The Imperial Theatre in Tokyo was the first to train actresses to appear in modern plays with actors; they have also been taught to play feminine roles in old Kabuki pieces. There are several groups of exclusively modern players, and many young actors of the old school have already attained considerable skill as "modern" actors. The monthly bills of the leading theatres, therefore, now contain at least one modern play. The latest move in our theatre circles is to reduce the length of entertainment to five hours—the usual limit has been between six and ten hours. At Takarazuka near Osaka a company of girls have been entertaining the music-loving public for some years with operatic rendering of fairy tales. The young Chinese actor-singer Mei Lanfang made a great hit in Tokyo and Osaka a few years ago. Some playwrights, critics, scene designers and painters have been in the habit of giving amateur theatricals once or twice a year, while university students and school boys and girls occasionally entertain their friends with plays in Japanese, English or other foreign languages. While the posture

dance masters and mistresses still keep to their traditional canons, some younger actors started a new movement in 1922 and are staging modernized dances on new themes, with new motions and poses, sometimes applying European instruments to Japanese music.

The number of theatres in the six premier cities as existing in Sept., 1927 was; Tokyo, 27; Osaka 24; Kyoto 14; Nagoya 21; Yokohama 2; Kobe 7. The figures for the Tokyo theatres are: No. of days open 8,719; No. of tickets sold 3,626,354.

2. PROFESSIONAL STORY-TELLERS

For all the feverish haste with which Japan is striving to keep up in various spheres of activity with the advanced nations of the West, there still remain, as may naturally be expected, many things that are reminiscent of the good old days that had flourished undisturbed for centuries till only sixty years ago. In the field of literature, especially fiction, this relic of the old feudal time is supplied, among others, by the tales of heroism and adventures with which the professional romance-reciters used to delight audience at variety halls or street corners in Yedo and Osaka.

Romance reading from a public stage is growing scarce owing to the change in the times and the dwindling of professional masters, but it still forms part, very often, of an entertainment program at a private banquet. As delivered by a veteran "reader," punctuated by the beating of a folded fan, a chapter from the life of one of the 47 loyal ronin, for instance, does not fail to afford half an hour's entertainment of thrilling interest.

During these ten years or so these romances have undergone an interesting change. They have been transferred from the public stage to the columns of newspapers and periodicals, where shorn of gestures and intonation as delivered by the "readers", they are literally read and enjoyed by immense number of people of all classes and both sexes, for devoid as they are of literary merit, they certainly present features which compare favorably in several respects with most of the current romances which too often consist of tedious psychological analysis and have not plot at all, or but a thin one. The trouble with these narrative romances is that being old compositions by the "readers" themselves, most of them dead, the stock is extremely limited, fifty at most, so that the stereotyped texts are going the round of one journal after another, and back again to the same columns after a number of years. Some commercial novelists have tried their hand in this line, but have generally failed to catch the popular fancy. It must indeed be a difficult task to write a romance appealing to the low taste of factory girls among whom the romances enjoy a tremendous circulation, so much so that the publishers of some monthlies serving these simple tales have acquired big fortunes.

3. MOTION PICTURES

Introduced about thirty years ago, the cinematograph has grown so popular that on the industrial side Japan now comes next to America, France and Germany. There are four leading

cinema companies, two each in Tokyo and Osaka, viz., Nippon Katsudo Kaisha (Japan Motion Picture Co., Ltd.), Tokyo, Shochiku Cinema Kaisha (Shochiku Cinema Co., Ltd.), Tokyo, Teikoku Cinema Engel Kaisha (Imperial Cinema & Theatre Co., Ltd.), Osaka, and Toa Cinema Kaisha (Oriental Cinema Co., Ltd.) Osaka. They all function as Producers, Exhibitors, and Distributors. The larger studios, one each in Tokyo and Kobe, two in Osaka and three in Kyoto are controlled by the four companies.

Though handicapped by imperfect equipment these studios are producing picture plays almost as good as in other countries, only they have not attained the exportable stage, chiefly because films of Japan produced abroad, despite their absurd representation of Japanese manner and custom, are acceptable to ignorant spectators. Pictures made in Japan are much better than "La Bataille" by Sessue Hayakawa, a Japanese picture player who has risen to notoriety abroad. About 80 per cent. of all the imported films are American, no doubt due to the fact that the Great War temporarily suspended the film industry of Europe. France and Germany have now begun to send their productions. In 1924, for instance, "Kean" and "Le Chant de l'Amour Triomphant" by Albatros, France, and "Sumurun" produced in Germany were imported. Branches of Westl, Germany, have been established recently in Tokyo and Kobe.

During the war time, the Universal of America almost monopolized Japanese cinema halls and its office in Tokyo is doing its best to maintain the fame. The other American distributors whose productions are represented in Japanese halls are United Artist, First National, Paramount, Metro, etc. During the one year from July 1, '25, to June 30, '26, Japan imported from America 1,429,241 meters of finished movie films against only 282,740 meters from Europe. Compared with the European pictures, the American films are generally more popular and command higher price. During the same period Japan bought from abroad 1,725,161 meters of blank films to produce native pictures. Judging from the difference in prices between American picture films and those produced in this country the former are more popular than the latter.

One unique feature of Japanese cinema shows is the invariable presence of "Interpreters," a new profession called into existence for explaining foreign films to the spectators, and these professionals number at present no less than 8,000. This is nothing wonderful when it is remembered that there are in Japan more than one thousand "permanent" picture houses and over sixty thousand temporary houses, so popular are the movies through the length and breadth of the country.

Japanese censors ruthlessly cut all love scenes which pass as a matter of course in Europe and America, such as lip-to-lip kisses, embraces of lovers, and sensual nude dances. Alive to the value of motion pictures for educational purposes, the educational authorities have lately established a committee to select pictures to be recommended for the purpose of public education.

4. INTELLECTUAL GAMES, INDOOR

Gobang, chess and card-playing, native and imported, are major intellectual games in Japan as played indoors. The third

is omitted here, as it is less refined and more open to gambling than the first two. These are generally believed to have originated in China and been introduced into Japan in remote antiquity by one of the Japanese envoys to China. As played in the two countries it furnishes a highly interesting study of their mentality. The Chinese style of play is dull and indecisive, like a bombardment at long range, while the Japanese play is comparable to a terrible combat between two antagonists and is exciting and conclusive, especially as regards chess.

Both gobang and chess were honored during the Tokugawa Shogunate with special patronage by the Government, and the recognized masters were granted a small fief. The coveted position as in the case of "No" dancing, tea-ceremony, artisans and others of non-warrior professions, was hereditary. Professionals of the two games are graded into nine according to their relative attainments, the 1st grade representing the initiated and the 9th the highest, one only among the living and called "master." The 8th is known as "deputy master," this honor being allowable to any number of contemporary players of proved ability. The gobang community has only one "deputy-master," but those of the corresponding rank in chess number five.

Gobang

The Japanese innovation or improvement effected in this game consists in counting the pieces in the "captured area" when deciding the issue of the contest, whereas, according to the Chinese practice, the area only, or rather the number of squares contained therein, is counted for the purpose. The squares of the Gobang-board total 361, being 19 by 19, and the pieces or "stones," as they are called, used by players, number 181 for the black and 180 for the white, the pieces being convex discs. The white pieces are made of shell of some marine mollusca while the others are of stone. A board of standard size measures $17\frac{1}{2} \times 15\frac{1}{2}$ and the best are made of the wood of *torreya nercifera*.

The principle of this game is to secure a larger half of the space of 361 squares, and hence very often the issue is apparently indecisive until the final counting. What adds to the enjoyment of the game is the relative number of pieces captured, for the difference of space is very often more than accounted for by that of captured pieces. When the contest is animated the number of captives is generally large, but this very rarely happens for a match between high-grade players. There are naturally two kinds of players, one represented by those who are aggressive and intent on making captives, and the other by those whose plan of operation is pacific and is aimed at space-grabbing. The fundamental principle of this game is that a space containing two independent "eyes" or squares is inviolable, so that any prolongation connected with this base is immune from capture. The object of each player is therefore to prevent his opponent forming the inviolable squares and to cut his line of connection with any of them. In this respect the practice of gobang very much resembles ordinary military operations. Of the black and white pieces the former are used by an inferior or a defeated player, and the odds conceded to a weaker player consist of a suitable number of moves before the commencement.

the moves consisting of stones placed at the marked spots, nine in all. In this game there are no pieces and officers, all the stones being of uniform power, and this peculiarity makes the play rather abstract and less exciting than the other.

Chess

This is far more popular and democratic than the other, perhaps because the apparatus used is simpler and hence more accessible to ordinary folk. Indeed the very fact that it is as equally enjoyed by laborers as by the wealthy seems, in the eyes of some snobbish persons, to make it less dignified than the other. What is interesting at the same time is that the game more strongly appeals to military and naval officers than gobang, probably because its moves and operations have much in common with the principles underlying manœuvres and actual warfare. Report says that the late Meiji Tenno and his successor Taisho Tenno were partial to it and that this partiality is shared by the reigning Emperor. It is generally admitted to be more complicated than gobang, as may be seen from the fact that while the latter counts no small number of lady experts such is very rarely the case with the other. In Japanese chess captives are freely employed and in consequence some pieces change hands any number of times according to the development of the play, this complicating the process and hence adding to the enjoyment of the game.

Japanese & European Chess.—While possessing some common features, the two have striking points of contrast. In the first place the Japanese board is divided into 81 squares with 20 pieces on each side. Both have footmen or pawns and king, but here the parallel ends. There are no pieces in Japan corresponding to queen, knight and rook, though bishop is very nearly represented by the Japanese Kaku that can move one square and sweep only diagonally before it is promoted. The setting of pieces in the Japanese game is in this order; first the king in the middle or 5th square as counted from either right or left, and on both sides are arranged four pieces, i.e. Kin (gold), Gin (silver), Keima (horse), Kyosha (spear). In front of Keima from the right is placed Hisha (filer), while the corresponding position from the left is occupied by Kaku. The two may be considered as advance guards. The third range of squares from each edge is filled with Fu (footmen). The privileges of the King are identical in the two systems, except that in Japan there is no castling. The Gold moves only one square at a time in any direction, except diagonally backward; the Silver cannot move either laterally or backwards; the Horse can move only to a third square obliquely forward, either right or left and corresponding to the apex of the letter V; the Spear, one square forward or the whole uninterrupted file forward. Of the two advance guards the Diagonal sweeper moves diagonally either one square or the whole range if left open, and the Filer forward, backward and laterally in the same manner. The Footman has the privilege of moving only one square forward. When promoted all the pieces and the Footman acquire the function of the Gold which is unchangeable. The two advance guards when promoted acquire the additional power of moving just like the King, in addition to their original privilege.

As mentioned above the Japanese game admits the employment of captives and hence the player must vigilantly keep before his eyes the captured force of his opponent. On the whole, the Japanese chess is more difficult to learn than the European counterpart and it is said that a Japanese chess expert can readily acquire in the course of a voyage lasting say a couple of weeks sufficient skill in the other game as easily to match a foreign player of average strength in the latter. The odds allowed to a weaker player range between the minimum of one Spear omitted and the maximum of a solitary King with only 3 Footmen in hand on the stronger side, but in general the omission of the two Advance Guards is the highest concession. This omission represents the difference of ten grades in the capacity of the opposing players.

CHAPTER XXI

CONSTRUCTION

A. PUBLIC WORKS

INTRODUCTORY REMARKS

Under the heading fall all works on Roads and Bridges, Rivers and Harbors, Water Supply and Sewerage, Irrigation and Drainage, Sand Arrestation, and Coast Protection carried out in Japan Proper. Those in Taiwan, Chosen, Karafuto, and South Manchuria are to be found under the respective headings.

The administration of public works is in the hands of the Minister of Home Affairs, Governors of Prefectures, etc. according to the kind of works specified in the Ordinance.

The expenditure for public works is borne variously by the State, Prefectures, Municipalities, etc. according to the nature and importance of such works, and the localities or parties most benefited thereby. The amount of money expended in 33 years between 1885 and 1917 totals ¥1,126,640,000 (¥34,140,606 a year on an average) of which about 12% was borne by the State. Of late years the expenditure has risen considerably above the average owing to various causes, as may be seen in the following tabulation covering the 3 fiscal year ending Mar. 1925:—

Expenditure Borne by the State

	1924-25	1923-24	1922-23
For River work.....	¥19,567,194	28,604,795	26,191,217
„ Sand arresting	993,198	832,873	870,104
„ Harbor work	11,764,519	11,674,753	9,958,452
„ Bridging work	126,859	268,423	434,926
„ Total	38,622,253	42,823,271	38,852,477

Expenditure borne by Prefectures, etc.

	1924-25	1923-24	1922-23
Prefectures	¥117,297,000	¥118,157,000	¥37,551,000
Districts	—	—	3,647,000
Cities	80,463,000	71,305,000	13,043,000
Towns & Villages.....	42,120,000	38,377,000	15,351,000
Local Unions	12,399,000	10,400,000	4,724,000
„ Total	252,279,000	238,239,000	74,315,000

The State aids for the various works amounted to 12% in 1915 and 8% in 1916 of the total expenditures.

N.B.—Districts or “gun” as local administrative unit were abolished in recent years and hence the figure for 1923-24 and 1924-25 years are included in that for Prefectures.

ROADS

The Road Law promulgated in 1919 divides the roads into 4 classes, viz. Koku-do, (National roads), Fuken-do (Prefectural roads), Shi-do (Municipal roads), and Choson-do (Town and Village roads).

The first class comprises roads from Tokyo to the Great Shrine of Ise, Headquarters of Army divisions, Naval stations, Prefectural capitals, and chief open ports, and all the important military roads. The Prefectural roads are those connecting the Prefectural capitals and other important points within a Prefecture, and so forth. The normal widths of National and Prefectural roads are to be more than 24 ft., and 18 ft. permissible of reduction to 18 ft. and 15 ft. respectively when located in mountainous regions.

Important Municipal roads are to be more than 18 ft. in width, and town and village roads, 12 ft. The ruling grade for National roads is 1 in 30, and that of Prefectural roads 1 in 25 in the flat country and 1 in 15 and 1 in 10 in mountain defiles. The bridges on National and Prefectural roads are to be proportioned to carry a uniform load, of 100 lb. per sq. ft., 12 ton steam roller, and 8 ton wagon. At the end of 1924 the total mileages of roads in the country were National 5,080, Prefectural 56,998 and others 573,710 miles. There were on these roads 420,694 bridges with span length exceeding 6 ft., totalling 880 miles in length, of which 1,132 miles were of metallic construction and the rest of wood and stone.

The expenditure for the construction, reconstruction and repairs of roads during the 3 years from 1922 to '24 was on an average ¥83,211,000 a year, defrayed as follows:—

	1922 (Yen 1,000)	1923 (Yen 1,000)	1924 (Yen 1,000)
National roads	13,023	11,899	14,590
Prefectural roads	31,801	36,955	32,742
Municipal roads	30,534	34,709	29,232
Town & village roads.....	20,419	20,959	20,146
Total	80,365	87,242	82,025

Road-making is earnestly attended to by the authorities both in reconstruction and extension. The program which was definitely fixed by law in 1920, contemplates the improvement and reconstruction of about 5,000 miles of National roads, 980 miles of Prefectural roads, and streets of 6 great cities, viz. Tokyo, Osaka, Kyoto, Yokohama, Kobe, and Nagoya as a 30-year work at an expenditure of ¥628,800,000 of which ¥282,800,000 is to be borne by the State. The work was, however, retarded by the 1923 disaster after which the yearly amount of the State aid was curtailed to ¥8,500,000 from ¥10,000,000. During the eight years ending 1926 the construction of about 80 miles of National roads and 10 miles of Prefectural roads, and the pavement of a part of streets of six large cities were completed. The present Ministry attaching importance to the road improvement has formulated a plan to complete the improvement of about 1,500 miles of National roads, 3,370 miles of Prefectural roads and principal roads of all cities and towns under the Special Town Planning Law as a work spread over 10 years commencing 1928 at an annual outlay of ¥10,000,000. It need hardly be said that

the approved formula as to method and material is followed for construction, especially for the cities.

TRAMWAYS

Tramways are permitted to be laid on roads under conditions defined by the law, and in manners subject in every detail to the approval of the Bureau of Public Works. At the end of June 1927 there were 193 lines of tramways, of which 105 were electric, 32 steam and the rest of miscellaneous kinds, and the total mileage in operation was 1,667 miles and in construction, 250 miles. The gauges of the tracks vary from 2 ft. 6 in. to 4 ft. 8½ in. The total investment amounted to ¥2,044,232. The profit arising from the working of the tramway averages about 6% on the invested capitals.

RIVER WORKS

The river works in Japan are chiefly for the protection against inundations, the importance of which may be seen from the following statistics of damage caused thereby:

	Amount of Damage	Cost of Repairs
1919	¥ 37,541,000	21,136,000
1920	51,682,490	37,186,188
1921	52,650,411	28,008,016
1922	34,529,507	21,403,147
1923	30,625,260	30,193,869
1924	9,390,000	11,433,858

Great floods in the whole country on record between the years 566 and 1866 are no less than 426 in number, making the occurrence once in three years. The most disastrous one in recent years was in 1896, which devastated more than 1,900,000 acres of farming land and caused damage estimated at ¥137,694,800. The River Law promulgated in 1896 has made Prefectural Governments generally responsible for the maintenance of rivers within their territory, and only in cases where several prefectures are concerned does the Central Government take the work in hand. Up to 1917, 32 main rivers, 47 tributaries and 22 minor streams were dealt with according to the Law. The following table gives the cost of the work and the source of funds disposed of in fiscal years 1920-'23:—

	1920	1921	1922	1923
State	—	—	—	—
Prefectures	¥26,466,276	29,002,693	32,236,890	30,487,125
Districts	—	313,296	253,744	267,937
Cities	1,344,261	1,063,796	857,448	864,022
Towns and Villages ..	4,165,419	6,696,126	7,004,663	5,910,549
Local Unions	1,199,182	1,564,516	1,292,042	1,765,345
Contributions	—	—	—	—
Total Cost	33,175,138	38,640,427	41,644,737	39,294,978

The total cost in fiscal years 1922-24 and 1924-25 amounted to ¥36,325,000 and 37,705,000 respectively.

Owing to the frequency of floods in late years and the increasing extent of devastations, caused by the increase of land

brought under cultivation, and by extension of drainage and deforestation, the Government has since 1911 taken a more drastic measure, by which 20 rivers are to be improved in 18 years, as the work of the first period, at an estimated cost of ¥176,740,500.

These are to be followed by 45 more rivers, which are now being investigated. The progress of the work has been interrupted more or less by the high cost of labor and material since the close of the European War, necessitating on the one hand the extension of time and on the other increase of appropriation.

Great as is the draft on the purse of the nation which the work of river improvements calls for, it is an investment for perpetual interest to the country. It is estimated that, as the result of the aforesaid works of the first period alone, the increase in the rice crop will amount to more than ¥43,000,000 a year.

Closely allied with and mainly pertaining to river works and for that reason, included in the latter, is the work of sand arrestation. The expenditure for this, which amounted to ¥935,400 in 1915 and ¥917,900 in 1916 was largely borne by the prefectures.

New River Work Program

The 1st term program of the river work plan which had been adopted by the Government in 1911 and was in progress under the direct management of Home Office, was revised in 1922 both from necessity of administrative retrenchment in the 1923 fiscal year and also in consequence of the decision to take up in the 1924-5 fiscal year, the work of 6 rivers as the Tenryū, Shinano, etc. that figure on the 2nd term program. The consecutive disbursements spread over twelve years and the burden to the State coffers are as follows as officially published in Dec. 1922 (in ¥1,000):—

	Total	Of which State disbursement		Total	Of which State disbursement
1923-24	30,150	18,000	1931-32	18,606	18,000
1924-25	27,025	16,000	1930-31	19,066	18,000
1925-26	26,799	16,000	1931-32	18,606	18,000
1926-27	25,765	16,000	1932-33	11,628	11,386
1927-28	23,892	16,000	1933-34	4,519	4,177
1928-29	23,638	18,000	1934-35	1,479	1,137
1929-30	20,199	18,000			

N.B. The balance is to be met by the local Government.

As regards details of the original and 1st term program the reader is referred to the J.Y.B., 1921-22 Edition, P.P. 212 and 214.

HARBOR WORKS

While the history of harbor works in Japan is almost as old as that of navigation, modern works of magnitude date from the unsuccessful attempt at creating a harbor at Nobiru in 1878. Nearly ten years elapsed before the second one at Yokohama was undertaken. Since then, more than 40 harbors have been constructed or improved. The following list comprises all the harbor works (some of which are still in progress) whose total cost or estimate thereof exceeded ¥1,000,000. They are arranged in

chronological order, the Roman numerals indicating the number of periods into which the works were divided.

Abb.; B. W. Breakwaters; J. Jetties; G. Groins; Q. Quays;
E. Equipments; W. D. Wet Dock; L. P. Landing Piers;
D.g. Dredging; R. Reclamation.

Harbors	Works	Time	Cost
Nagasaki (I)	D. g.....	1920- —	2,500,000
Yokohama (I)	B. W., J., D....	1889-1896	2,346,187
Wakamatsu (I)	D. g., R.....	1918- —	15,730,000
Hakodate (II)	L. P., D. g., E..	1922-1925	2,750,000
Niigata (I)	B. W., D.....	1896-1904	1,196,256
Nagoya	B. W., D. g., R..	1920- —	8,670,000
Otaru (I)	B. W.....	1897-1908	2,188,066
Nagasaki (II)	D., R.....	1897-1904	4,599,798
Osaka (I)	B. W., D., R.....	1897-1917	22,918,000
Yokohama (II)	R., Q., D., E....	1899-1918	10,476,656
Milke	B. W., D., W. D..	1902-1907	3,000,000
Kobe	B. W., R., Q., E..	1903- —	63,660,000
Niigata (II)	B. W., D.....	1907-1921	3,000,000
Otaru (II)	B. W., P., R....	1908-1921	7,400,000
Kushiro	B. W., D., J.....	1909- —	7,000,000
Shimizu (I)	B. W., D., R....	1909-1914	465,241
Tsuruga (I)	D., R., Q., E....	1909-1914	734,243
Osaka	B.W., L.P., D., R.	1910-1916	1,411,574
Hakodate (II)	B. W.....	1910-1920	1,571,970
Rumoi	B. W., D., R.....	1910- —	6,360,000
Yokkaichi	B.W., D., J., W. D.	1910- —	7,000,000
Shimonoseki Strait	D.....	1910- —	13,760,000
Funakawa	B.W., R., W.D., D.g	1911- —	5,000,000
Tsurumi	B. W., D., R....	1913- —	10,000,000
Aomori (I)	Q., B. W., D., R..	1914-1924	3,570,000
Shiogama	Q., B.W., D., R..	1914- —	6,000,000
Niigata (III)	D., R., Q., W.D..	1915- —	6,340,000
Moji	B.W., D., R., Q., E	1916- —	9,800,000
Hakata	B. W., D., R....	1917- —	3,700,000
Osaka (II)	D., R., Q.....	1918- —	18,000,000
Muroran	B. W., D.....	1918- —	4,930,000
Samé	B. W., R.....	1919- —	1,200,000
Shimizu (II)	D., R., Q.....	1921- —	6,180,000
Yokohama (III)	D., Q., E. B.W., L.P	1921- —	28,580,000
Kagoshima	Q., D.g., L.P.....	1923- —	3,000,000
Takamatsu	B.W., R., D.g., L.P	1922- —	2,200,000
Imaharu	B.W.Q..L.P.,D.g.,R., W.D.....	1920- —	3,000,000
Komatsujima	B.W.,Q.,D.g.,W.D.	1923- —	3,200,000
Sakae	B.W., D.g., Q., R.	1922- —	1,800,000
Nawa	Q., D.g., R.....	1921- —	1,500,000
Tokyo	B.W., Q., D.g., R	1923- —	6,800,000
Fushiki	Q., L.P., D.g., W.D., R., B.W.	1924- —	5,000,000
Shimonoseki	Q., D.g., R.....	1921- —	3,610,000
Tsuruga	Q., D.g., B.W., R.	1922- —	3,400,000
Choshi	B.W., G., D.g., W.D., R.	1924- —	9,500,000
Abashiri	B.W., D.g.,	1920- —	2,840,000
Wakanai	B. W.....	1920- —	2,800,000

Including the colonial works, the total outlay for harbors during the past 30 years amounts to something like ¥500,000,000. The greatest amounts of money have been expended for Yokohama and Kobe harbors, where quays and piers have been constructed for receiving at their sides the largest ships afloat on the Pacific, and equipped with the most improved appliances, transit-sheds and warehouses for the loading, discharging and storing of cargoes.

The harbor works, with only a few exceptions, have been carried out by the State. Private ownership or lease of shore land and of water area in a harbor has been avoided as far as possible.

Of recent years, the impetus given to pelagic fishing and in consequence an extensive use of oil boats has made the construction of fishery harbors necessary at numerous places along the coasts. There are now seven such harbors each completed at the cost of ¥1,000,000 or over.

SANITARY WORKS

Water supply.—Wells have been the most common sources of water supply throughout the country. In places where potable water was not thus obtainable waterworks of simple construction were laid out and have been in use from olden times. Thus in Tokyo, the drinking water was until recently taken from the Tama river, 10 miles from the city, in open canals and conduits built 300 years ago. The first modern waterworks constructed in Japan was in Yokohama in 1885, designed by an English engineer H. S. Palmer. Yokohama was followed by the cities of Hakodate and Nagasaki. At the end of 1925 there were 148 civic corporations provided with modern waterworks, and more were in course of having them constructed, for supplying 2,612,778,220 koku of wholesome water. The total cost of these works is estimated at ¥187,522,000 of which the State aid amounts to ¥43,234,000. The following table gives the figures relative to some of the more important ones according to the latest returns:—

	Cost of Construction Yen 1,000	Length of Piers (1,000 ft.)	No. of Pipes (1,000)	No. of Pri- vate Cocks (1,000)	Yearly Receipt Yen 1,000
Tokyo	29,662	2,417	46,948	84	3,551
Kyoto	6,038	2,417	43	85	672
Osaka	23,494	2,185	831	143	4,616
Yokohama	10,407	853	11,367	17	—
Kobe	12,938	1,292	—	51	1,395
Nagasaki	6,923	287	11,567	7	381
Nagoya	5,280	1,052	178	37	444
Hiroshima	3,047	595	18,126	9	516
Okayama	810	226	9,741	9	217

The water supplied is generally filtered either by gravity or mechanically. The supply per head per day as designed varies from 1 to 4½ cu. ft., being 3.07 cu. ft. on an average. But the actual quantity supplied generally varies from 1 to 3 and exceptionally from 0.3 to 5.9 cu. ft.

The rate of charges varies somewhat with localities. Thus

in a house with not more than 5 inmates the charge is ¥6 at Yokohama and ¥5 at Tokyo per year, and ¥0.70 at Nagasaki and ¥0.55 at Kobe per month. Extra charges are made for extra inmates, horses, bath, etc. In Tokyo where meters are used in larger houses, the charge is ¥0.14 per cu. m. above fixed charges, the latter varying between ¥0.93 and ¥1.80 per 10 cu. m. according to the size of meters used.

The construction of waterworks is being extended to all the cities and larger towns. The State gives every facility and encouragement to such works; an aid to the extent of one half the cost of construction is given in certain circumstances. Waterworks Regulations do not allow the construction with private funds, except where the bodies cooperating are so poor as to be unable to raise the capitals necessary for the purpose.

Sewerage.—Complete sewerage systems are still lacking in most of the cities; open gutters and drain canals carry the rain and waste waters in most places. One reason of the comparative absence of sewers such as are constructed in Europe and America is in the larger use of fecal matters for agricultural purposes and the limited use of water in cleaning. The larger cities are naturally the first to feel the need of change. In 1920 there were 10 cities partially provided with more or less complete systems of sewerage. The construction of sewerage works of Tokyo was commenced in 1911 and the 1st period work was completed in 1923. The cost amounted to ¥15,000,000, one half of which was defrayed by the State. The 2nd period work started in 1923 at the estimated cost of ¥43,500,000 is to be completed in 1928. The work in Osaka was started in 1894 at an estimated cost of ¥7,300,000. That at Nagoya is to cost ¥4,400,000.

IRRIGATION & DRAINAGE

The cultivation of rice in Japan, wherever water for the purpose is available, makes irrigation a work of paramount importance throughout the country. Where the streams are not large, all surplus waters are carefully stored up in reservoirs built in their courses, to be let out in time of need into the network of canals with which the greater part of the farm lands of the country is literally covered. Drainage is secondary in extent as well as importance to irrigation. These works when completed as they mostly are, require comparatively little outlay to be maintained in good order. In four fiscal years 1913-'16, the total expenditure for irrigation and drainage amounted to ¥7,600,000 making an average outgo of ¥1,915,000 a year, which is largely borne by local unions.

COAST PROTECTION

Wherever the coastal properties are valuable or the safety of travel is to be ensured the shores are rivetted. The expenditure for coast protection arises from the extension of such work, as well as from the necessity of repairing damage. The extent of the latter may be inferred from the following statistics of damage caused by tidal waves.

Year	Amount of Damage (In Yen 1,000)	Cost of Repair (Yen 1,000)
1921	128	86
1922	140	562
1923	2,177	832
1924	150	643
1925	—	1,814

The kind of work carried out differs according to localities and circumstances. Most repairs are made by the use of wooden cribs or bulkheads which can be rapidly built or replaced, while all permanent works are either of concrete or stone.

TECHNICAL ASPECTS OF THE EARTHQUAKE DAMAGE TO PUBLIC WORKS

As described at some length in the Earthquake Appendix of the 1924-25 edition the damage caused by the 1923 earthquake to public works in the afflicted area was estimated at a little over 100 million yen. Below is quoted from the Appendix some paragraphs demonstrating the technical aspects of the earthquake damage.

Slopes of Cuttings and Bankings

Slopes are so designed as to keep the angle of repose. But at the time of earthquake intense acceleration both horizontal and vertical acts on the soil grain to diminish the angle of repose and finally to cause the collapse of the slope. It is customary to give an inclination of about 1 in vertical: 0.8 in horizontal to the slopes of hard clay and weathered volcanic rocks. Still at the time of severe shocks the angle of repose for these formations diminishes to 45° or 1 in vertical: 1 in horizontal. For the banking of ordinary soil a slope of 1 in vertical: 1.5 in horizontal is generally admitted as proper. In a great shock the angle of repose is reduced to about 25° or 1 in vertical: 2 in horizontal, and followed by collapse.

Retaining Walls and Earth Pressure

The earth pressure shows a remarkable increase for the same reason that the angle of repose shows a decrease. For instance, the pressure of the ordinarily banked soil in severe earth tremor grows by from 1.5 to 2 times that of normal conditions, and the walls retaining it give way at once, their factor of safety being far smaller than in other structures. The retaining walls much adopted in this country may be classified into dry rubble, concrete and re-inforced concrete walls. The first have been widely adopted in Japan from olden times for protecting roads and river-sides. They are constructed by laying one upon another large pyramid-shaped stones, with their bases turned outside, and filling in the gaps in the back with small rubbles. The banks of the moats surrounding the Imperial Palace in Tokyo afford an example of this construction. This kind of wall is the weakest against earthquake, but it seldom overturns or slips out en masse, the damage being generally limited to the upper part. In massive concrete walls the damage consists mostly

of tilting or slipping out, and less often of horizontal cracks of execution joints. Tilting and cracks seldom occur in re-inforced concrete walls; only a weak formation causes more or less slipping out. The quay walls of Yokohama port, 30'-40' in height and consisting of large concrete blocks piled up one upon another, suffered severely from the quake, some portions overturning or tilting badly, and others sliding out several feet. Such construction having thus proved incapable of resisting severe shocks, the authorities contemplate rebuilding those quay walls with large caissons of re-inforced concrete.

Banking

Almost all the roads and embankments built by banking up earth on soft ground suffered from the earthquake, sinking as a result of the diminished bearing power of the formation soil. At the time of great shocks the bearing power is reduced to one half in the soil whose angle of repose is less than 20° . In saturated silt the power almost disappears. In bankings upon silt longitudinal cracks are developed by the remarkable slipping which horizontal shocks bring about on the contact face of 1 silt and banked earth.

Abutments and Piers of Bridges

The abutments and piers supporting permanent superstructures are mostly masonry work of bricks, concrete or stone, which can bear heavy vertical load but are very weak against bending from horizontal force, hence their cracking and splitting at the time of seismic disturbance. Investigation into the damaged bridges shows that the tensile strength of masonry work at execution joints is only 10-30 lb. per sq. in. In order to increase seismic stability it is necessary to adopt such construction as will resist bending, i.e. re-inforced concrete. Taught by a severe lesson in the catastrophe of 1923 the Government has made it a principle to so design the substructures as to make them capable of resisting a horizontal force equivalent to 30% of the vertical load and their own weight, acting at the center of their gravities.

Superstructures of Bridges

As permanent superstructures, steel girders, steel trusses, re-inforced concrete beams, steel arches, plain or re-inforced concrete arches have been widely in use. Heavy structures possess weak seismic stability when acted upon by strong horizontal vibration. Almost all bridges built of re-inforced concrete beams upon re-inforced concrete bents fell off into the stream, so that such design should not be used hereafter except in the case of short spans for lighter traffic. Steel girders and trusses are very strong and even when those of railway bridges were thrown off from the piers more than 30 ft. high, they were not so badly broken beyond repair but could be put to use again with more or less of mending or re-inforcing, if there were some water cushion. But those of high-way bridges with heavy solid floors sustained serious injury. Therefore to make it safe against earth tremor a steel bridge must be provided with a substructure and support construction strong enough to resist

enormous horizontal force. The support as adopted heretofore leaves much room for improvement, for a slightly severe shock is enough to bend or shear off anchor bolts, and to draw out bed-stones, causing the displacement of superstructure. Arch bridges generally suffered little from the calamity, partly because they are usually built with strong foundation upon firm ground and partly because of the statical property of the arch. On the whole those arch bridges so designed as to be safe against the change of $\pm 15^{\circ}$ C. in the temperature were not affected at all by the catastrophe. Only radial cracks were seen where for the purpose of saving expense re-inforcement was not used.

Tunnels

The Miura Peninsula and adjoining districts are a hilly region of tertiary formation, and on their highways there are many tunnels, with a lining of brickwork about 2' 6" in thickness. All of these tunnels received more or less damage. In most cases it was due to the collapse of the cuttings at the portals, which blockaded the entrances. In the lining longitudinal cracks on the upper part predominated, these being more serious near the entrances. To make the tunnels earthquake-proof, the cuttings at the approaches must be avoided as much as possible while the lining should be of re-inforced concrete or concrete re-inforced with steel frames. But this means great increase of cost of tunnel-driving. The authorities should dispense with tunnels so far as circumstance permits.

Waterworks and Sewerage

The extensive damage on waterworks in Tokyo and Yokohama is chiefly attributed to the weakness of pipe joints against the shocks and the non-resistance of the whole structure against the horizontal bending force. The pipe joint in this country consists of a socket filled with lead. The lead was thrust out by the motion of the pipes in different directions, leaving gaps for the high-pressure water to easily leak out. The settling basins, filter beds, pure water reservoir, etc. were mostly of brickwork, and they developed cracks both large and small. Especially in Yokohama they became incapable of holding water. In Tokyo three out of six delivery pipes at the pumping station were broken, causing much difficulty for repairs. These pipes had been fixed at one end to the wall of the pump-house and at the other to the concrete mass outside. The result was the difference of motion at both ends caused by the quake brought about a great bending movement, ultimately causing the dislocation of the pipes. The open channel which connects the river with the settling basin was damaged at three places through the collapse of concrete walls, and occasioned for a time the stoppage of water supply for the whole city.

The sewers in Tokyo city have been in recent years reconstructed of re-inforced concrete, and on the fatal occasion the canals and conduits all came out safe. Only some cracks occurred in the settling basin at the purifying plant which was built of plain concrete on a made-up ground, while 20,000 gallon elevated tank of re-inforced concrete fell down because of the weak stand giving way. Being old-styled conduits of brick or

concrete, the sewers in Yokohama were mostly crushed under ground, and a great deal of difficulty was experienced in their reconstruction.

B. ARCHITECTURE AND EARTHQUAKE

GENERAL OBSERVATIONS

It may be stated at the outset that in representing the strength of earthquake vibrations engineers generally use the seismic coefficient (K) and determine its relation to seismic force (F) according to the following formula:

$$F = \frac{W}{g} Ma = WK, \text{ where } M \text{ stands for "mass," } W \text{ "weight"}$$

and a "maximum acceleration due to earthquake," and g "acceleration due to gravity, i.e. 9,800 mm/sec. 2 ".

Except at places very close to the centre of disturbance, the destructive force of an earthquake as acting upon buildings chiefly comes from horizontal vibration. The force as affecting a building may therefore be considered as lateral and in proportion to its weight. Upon that hypothesis the value of K in Tokyo as regards the September earthquake is represented as follows:

Up-town (alluvial formation), Tokyo.....	0.1
Down-town (alluvial formation), Tokyo.....	0.25

The late Dr. Omori, who made an exhaustive study of the natural vibration period of many high and low buildings made of steel or re-inforced concrete, observed that in all cases the period of the vibrations did not exceed one second, in some cases it being between 0.3 and 0.5 seconds, far shorter than 1 to $1\frac{1}{2}$ seconds as in the late great earthquake. From this fact he came to the conclusion that each building was practically one simple body and is most strongly stressed at the base, this rule applying to almost all kinds of buildings. From the point of view of theory and practical experience so far it may be said that the principle of the earthquake proof system of construction of steel, re-inforced concrete and other buildings is to built them as one mass from the base to the roof with the greatest possible rigidity. Devices should also be employed to magnify to the greatest possible degree the resisting power of the buildings against their being compressed out of form on account of the lateral force exerted by earthquake vibrations. However, this is a matter of great difficulty, because the mode of construction and planning of buildings differ according to the different purposes for which they are intended. For instance, some buildings have to be divided into many small rooms or sections, others require to be built so as to have spacious halls as in the cases of auditoriums, libraries, theatres and the like, while still others must be built so as to have spacious halls on the ground floor and many storeys above divided into many smaller rooms as in the case of banking houses. Such being the case, it is very difficult strictly to observe the afore-mentioned principle in the construction of all kinds of buildings. That many Japanese wooden framed buildings built with pillars, beams and girders fell easy victims to the late great earthquake and not a few

American style buildings built with a steel skeleton and facing of hollow bricks were subject to severe damage in the same quake was due to their poor power of resisting the lateral force and the consequent increase of the possibility of their being compressed out of form. The only method to erect houses and other buildings as one whole body or mass is as follows:

(1) To protect the walls against their being compressed out of form, they should be braced or made of re-inforced concrete.

(2) The floors should be made as rigid as possible for which purpose re-inforced concrete answers very well.

Walls and Floors

By following the above mentioned principles both walls and floors will be secured against the attack of the lateral force and any massive buildings can be made as rigid as one simple body or mass because the walls thus secured against the lateral force serve as a perpendicular cantilever and the floor as a monolithic conveying to the walls the lateral force of the earthquake vibrations which act on the floor. The walls sustain more or less of the shock of the lateral force thus conveyed by the floor in due proportion to the degree of its rigidity; and this can be ascertained through minute calculations. For instance, take an open bottomless box and a closed box of the same make, and placing them on the floor or ground with their sides upward press forcibly upon them. The former will be crushed easily and destroyed, while the latter remains tight and unchanged in form and stands as one concrete substantial mass however hard you may press it. This is because of its superior rigidity on account of the bottom which acts as walls supporting the box and protecting it against the lateral force which most strongly acts at the end or corner of the walls. The same holds good in the case of buildings in which the extra force acts on the pillars connected with walls, so that the pillars and the base supporting them must be made as strong as possible. To prevent the joints connecting the pillars and beams from being compressed out of form by the influence of the lateral force it is necessary to use brackets, knees or diagonal braces in the joints; at the same time the joints of each section of the building should be made as simple and rigid as possible, and above all it is very important to make the fixing perfect and strong. Again, the base of the building must be as strong as possible and utmost care should be exercised to make tight the connection of the pillars, because a partial sinking or displacement of the base very often causes the total collapse and destruction of the whole building. In wooden framed buildings, in particular, the joint connecting the pillars with the beam should be made as strong as possible, and care must be taken to form a triangular frame by using bolts, straps and struts in the joints and using bracing in the walls, because any object of triangular form becomes strong and firmly fixed in shape if its three sides are settled and secured.

SEISMIC VALUE OF DIFFERENT STYLES OF BUILDINGS

Frame Buildings

Wooden framed houses if properly constructed will be ideal earthquake proof houses with less cost and more power to

resist the earthquake force, though from the point of fire risk they are decidedly disqualified for city buildings.

Steel Buildings

Steel buildings should be built according to the same principle and be made rigid with walls of re-inforced concrete. Walls built with hollow bricks or terracotta, or thin common brick walls lack rigidity and are powerless to resist the lateral force exerted by the earthquake shocks. Rigid and strong frame or walls should be provided at proper distance and at such positions as is convenient to the planning of the building. The same is the case with the re-inforced concrete buildings, which if they lack rigidity will fall easy victims to the lateral force. The pillars and beams will be crushed at both ends and precipitate the collapse of the whole building.

Mode of Execution.—A close examination of the buildings crushed or destroyed in the late great earthquake shows that the direct cause of their fall lay in the loose mode of construction. It should be noted that the mode of the execution of construction has much to do with the rigidity or looseness of the building; for instance, a joint made of concrete containing laitance is utterly powerless to resist, but easily cracks under the pressure of the lateral force. To build a house hastily in an unusually short period of time or to build it in the severe cold season is certainly not the way to secure it against the effect of an earthquake shock, nor is the lack of proper care and attention in the mixing or wetting of concrete likely to ensure the rigidity of the building.

Brick Buildings

Brick buildings are most undesirable and uncommendable as earthquake proof buildings, but if built according to the afore-mentioned principle, and horizontal re-inforced concrete girders are used throughout the brick walls around the buildings at the floor level and roof level, they will stand against the lateral force exerted by an earthquake of considerable breadth. Several buildings built according to this system escaped unhurt in the disastrous September earthquake such as the building of the General Staff Office, which is a pure brick building, repaired according to the said system some years ago. The building survived the late great earthquake with but slight damage. The brick building housing the Tokyo Prefectural Office was rebuilt according to the same system after the earthquake.

Lessons from Santa Barbara Quake.—The fact that buildings lacking in substantial frame, or integral walls are generally powerless to resist the lateral force and are therefore liable to severe damage was clearly established by the recent great earthquake in Santa Barbara, California, in which many re-inforced concrete buildings with slender beams and weak outer walls of bricks were severely damaged or collapsed.

The foregoing statement outlining the condition of the different kinds of buildings destroyed in the late great earthquake and the essential points of the principle for the rigid construction of buildings will suffice to enable the general readers to grasp the main ideas as to the mode of construction of

The Jitsugyo Building housing the Jitsugyo-no-Nippon Publishing Office is a 6-storeyed steel building with one underground room, and as shown in Plan B, its partition walls are of rigid re-inforced concrete, the spandrel of the outer walls being designed so as to form a rigid strong beam.

REVISED CONSTRUCTION REGULATION

Subsequent to the seismic disaster of September 1923, the construction regulations in force were revised in accordance with the afore mentioned principle. To cite a few instances:

All buildings shall be provided with bracing or struts;

In case the walls of the building are made of stone or bricks, either steel beams or re-inforced concrete beams shall be provided at the top of the walls;

In steel buildings, the joints connecting the beams or other cross-pieces with pillars shall be firmly fixed by using proper struts or panels or other skirting, except at the places where the walls are made of bracing or re-inforced concrete;

In steel buildings and re-inforced concrete buildings, they shall be provided with proper bracing or walls made of re-inforced concrete, etc., etc.;

In the calculation of the rigidity of the buildings, the unit of the horizontal vibrations of an earthquake shall be fixed at 0.1 degree and upwards.

Lastly, what calls for especial attention in the construction of all kinds of buildings is to make them as light as possible in order to lessen the effect of the seismic motion on the buildings. There has been so far no thorough study and research into the power of resistance of such high buildings as American skyscrapers to the lateral force of the seismic motion. But in our opinion, the principle already outlined for the construction of earthquake-proof buildings will hold good with the construction of those high buildings on the whole.

CHAPTER XXII

POST, TELEGRAPH & TELEPHONE

1. POST

History.—With the advent of the Meiji Era, the Government, taking into consideration the defects of the antiquated system of relay-carriers and street-carriers, elaborated a postal regulation (1868) on the model of Western countries. In December of the same year, a regular service was opened between Tokyo and Kyoto. This was, indeed, the beginning of the postal system, as such, in this country. In March 1870, the system was extended, and Tokyo, Osaka, Kyoto and Yokohama were connected between themselves. Also the postage stamps were issued at the same time. In March, next year, a new postal system was organized and put under the sole and exclusive supervision of the Ekitel-kyoku (the "ci-devant" Board of Communications). Subsequently the service was further extended to Kobe, Nagasaki, Niigata and Hakodate, and the kinds of mailable articles were also greatly increased. The charges were calculated according to the distance to be covered. In March, 1873, the postal regulations were recast, and private individuals were forbidden to undertake the letter carrying business. By the new rules, the rates were made uniform for all the places throughout the country. In June, 1877, Japan became a member of the International Postal Union, and gradually the service has been carried to a state of high efficiency, both in internal and international relation. At first several European countries established and maintained their own post-offices at Yokohama, just as our country maintained its own post-offices at several treaty ports in China till 1922. The British Government had its own post offices at Yokohama, Kobe and Nagasaki, but these were withdrawn in 1879, and this example was followed a year after by France. Thus Japan secured for the first time the administrative autonomy in postal affairs.

Organization:—According to the existing organization there are three grades as to status of Post Offices, namely 1st, 2nd and 3rd classes. The Offices under the first class are located in important centres of the country, as Tokyo, Osaka, etc. and besides dealing with their ordinary postal, telegraph and other affairs supervise lower-class offices. Over these are the Communication Offices to supervise their business and also maritime affairs. The Communications Offices are seven in number and are located at Tokyo, Osaka, Kumamoto, Sendai, Sapporo, Hiroshima and Nagoya. The 3rd-class post offices, which constitute a greater majority of post offices in the provinces, are conducted on the contract system by granting the privilege to men of good standing and credit in the locality. This expedient is proving highly economical.

Japan kept a number of post offices in China, at Peking, Tientsin, Newchwang, Chefoo, Shanghai, Nanking, Hankow, Sha-

shi, Soochow, Hangchow, Foochow, Amoy, Canton, Changsha, and Swatow, all of which were withdrawn in 1922 as a result of agreement at the Washington Conference.

Special Business Attended to by Post Office:—Matters attended to by our post offices are of diverse descriptions, as may be seen from the Resume of Rules in Operation printed later. It may be interesting to mention that since 1906 the Post Offices in Tokyo and other centres have been undertaking the New-Year Greeting service, which is a special device to relieve congestion of mail business from over-crowding of New-Year cards or letters. To prevent this congestion the Post Offices receive from about Dec. 15th such complimentary mail matters and deliver them to the respective addresses on New Year's Day. Receiving taxes for conveyance to the proper taxation offices and paying of pensions, annuities, etc., on behalf of the Treasury are other business to which the Post Offices are attending for convenience of all people concerned. Since the creation of the postal pension system in 1926 the business relating thereto is also attended to by the post offices.

Delivery of Ordinary Mail Matters:—The number of delivery is 6-5 times per day in Tokyo, and in Osaka and Kyoto, the average for all the 1st class offices being 4-5 times. The corresponding figures are 3-4 for 2nd class offices and 2 for 3rd class offices situated in villages. In Tokyo each post-man has to undertake in a day either five deliveries or six collections. It may be added that the maximum limit of sorting of ordinary mail matters is 60 per minute.

Parcel Post:—The Parcel Post Service was started in 1892 and as regards foreign connection the first arrangement was concluded with Hongkong in 1879. The scope of international service was gradually extended, and at present it covers almost all treaty countries.

2. TELEGRAPH & TELEPHONE

Telegraph and Telephone Service

The first Telegraph Service Regulations were issued in 1872 and seven years after Japan joined the International Telegraph Convention. In 1883 the country became a member of the International Union for the Protection of Submarine Cables. The latest statistics about the length of aerial lines, bare, underground cables and submarine cables are as follows:—

End of March	Telegraph (ri)			Telephone (ri)		
	Aerial line	Underground	Submarine	Aerial line	Underground	Submarine
1923	60,266	1,582	3,715	93,122	301,097	378
1924	62,859	3,171	3,768	92,097	306,239	485
1925	58,632	4,677	4,050	98,043	374,498	471
1926	58,662	6,249	4,516	125,526	468,609	532
1927	58,811	8,926	4,620	133,504	549,536	730

The cable between Nagasaki and Fusan via Tsushima was laid in 1882 by the Great Northern Telegraph Company under charter for 30 years. The line between Nagasaki and Tsushima was purchased by Japan in 1891 at ¥85,000. The purchase of the

remaining portion between Tsushima and Fusan having been judged necessary with the annexation of Korea, the negotiation was opened and successfully concluded, the transfer being effected in October '10 for ¥160,000. About the same time the work of laying an additional cable between Japan Proper and Formosa was completed. In consequence the authorities reduced the fees between Japan Proper and Formosa and Korea, the new schedule being put into effect on Nov. 10th of the same year.

International Cable Service

By agreement made in 1870 Japan conceded to the Great N. T. Co. of Denmark the exclusive right of landing on Japanese territory cables for international service. It was in virtue of this right that the Danish Co. laid cables between Nagasaki and Shanghai, Nagasaki and Vladivostok, and Nagasaki and Fusan. Japan purchased the Nagasaki-Fusan cable, the first section as far as Tsushima in 1891, and the remaining section in 1910. During the Russo-Japanese War Japan laid a cable between Sasebo and Dairen, and next from the latter place to Chefoo. In 1912 the concession to the Danish Co. expired, but it was granted a charter to carry on the service on Japanese territory. The government then opened negotiations with the Co. and also the Great Eastern T. Co., as well as with China and Russia, with the object of laying a Nagasaki-Shanghai cable and also a special cable connecting Japan with Siberia. The negotiation having been satisfactorily concluded, it is expected that the Government will make arrangements before long to proceed with the work.

Wireless Telegraphy, Home and International

Japan became a member of the International Wireless Union in 1908. For regulating the exchange of "wireless" between the Japanese coast stations and foreign steamers, or vice versa, a regulation based on the International Radio-telegraph Convention of Berlin was put into effect in July, 1909. In Nov. 1916, the Funabashi Wireless Station, of the Imperial Navy, was put for communication with Hawaii and America.

With the completion of the Iwaki Wireless Station (of the Communications Dept.) in Hara-no-machi, Fukushima-ken, in March 1921, the direct communication with the two-American Continent was established and the ordinary wireless exchange business hitherto attended to by the Funabashi Station was transferred to the Iwaki Station. The Station is equipped with an antenna pole 660 feet high and with a capacity of 400 k.w. and a transmission power of over 4,000 miles. For direct service with European countries a station was constructed at Osaka in 1923.

Till March 1927 the Iwaki Wireless Station attended to both outgoing and incoming messages, but on the completion of a new radio station established at Fukuoka-mura, Saitama Prefecture, in April 1927, it attends to outgoing messages only, the new one specializing in the incoming messages from the American Continent. It is claimed to be the largest radio station in the Orient and its plant and apparatuses were made at home.

A new coast radio station exchanging messages with the steamers at sea was established in Yokohama and opened in May '27.

At present there are in operation 12 Government and 3 private shore installations besides one each in the Kwantung Leased Territory, Formosa, Saghalien, and Korea, and 7 in South Sea Islands. Those at sea number 50 Gov't and 607 private.

Wireless on Ships.—The wireless telegraphy on ships law published in March '25 obliges all Japanese vessels with gross tonnage of over 2,000 tons or carrying over 50 souls on board to be provided with wireless apparatus; otherwise they can not engage in either ocean or coastwise navigation. A fine not exceeding ¥2,000 is attached to the law, which is applicable *mutatis mutandis* to foreign vessels coming under the above mentioned category in case they enter or leave the ports where the regulation is in force.

Lower Press Rates to U.S.A.

By arrangement between the Communications Department, foreign telegraph concerns and the American Radio Corporation the press rates as regards the Corporation's service were lowered on November 1, 1926 as follows:—

Japan—New York	45 sen per word (former rate 60 sen)
Japan—San Francisco	36 sen per word (former rate 54 sen)
Japan—Honolulu	24 sen per word (former rate 44 sen)

Radio Telegrams

Regulations regarding radio telegrams to steamers at sea were issued in March 1924 by the Minister of Communications. Fees are as follows:—

Monthly fees	Japanese	European languages
¥140	Under 1,000 letters	Under 200 words
200	" 1,500	" 300
260	" 2,000	" 400

International Radio Service

From consideration of finance the original Government plan to establish powerful international radio stations as 5-year work was replaced by the formation in April 1925 of a semi-official company with a capital of ¥20,000,000 of which the Government is to supply ¥2,300,000 in the shape of its Iwaki Wireless Station. The necessary stations for dealing with foreign service has been reserved as work to be attended to after the 1926-7 year.

Radio Broadcasting

Between March and July 1925 broadcasting service was started in Tokyo, Osaka and Nagoya, where private stations had been established under the control of the Communications Department. At the instance of the Department the three corporations were merged in Aug. 1926 into one organization under the title of the Japan Radio Broadcasting Association. In April '28 the association established four branch stations at Hiroshima, Kumamoto, Sendai and Sapporo. The eight stations now operating are as follows:—

Stations	Denomination	Service started	Monthly fee	No. listeners in	
				July '23	July '27
Tokyo	J O A K	Mar. '25	¥1.00	237,412	236,102
Osaka	J O B K	June '25	1.00	110,196	87,874
Nagoya	J O C K	July '25	1.00	45,122	48,565
Hiroshima	J O F K	Apr. '28	1.00	5,710	—
Kumamoto	J O G K	Apr. '28	1.00	7,690	—
Sendai	J O H K	Apr. '28	1.00	6,031	—
Sapporo	J O I K	Apr. '28	1.00	7,848	—
Seoul	J O D K	Feb. '27	1.00	5,892	3,416

Telephone

It was in Dec. 1890 that the service was opened for public use, but only in Tokyo and Yokohama and between these two cities. The long distance service was inaugurated in 1897 between Tokyo and Osaka, a distance of 350 miles. At first the convenience which the telephone service affords failed to receive the attention of the public, and the authorities took special pains to invite subscribers. The public were not slow to appreciate the usefulness of this convenient medium of communication, and hastened to apply for the connection, so that the authorities, who started the service as a Government monopoly, found it impossible to meet the applications. Indeed the number of applications for telephone connection is far in excess of the number of installations which the authorities can undertake with the fund at their disposal. Thus, as computed at the end of Sept. 1922 the outstanding applications throughout the country numbered 282,221. As each applicant must deposit ¥15 to 5 according to places, the sum held in trust by the authorities on this account reaches over ¥3 millions. The excess demand over supply has given rise to the telephone broker business. The transfer of the privilege of the installation commands a price between ¥1,000 and 2,000 or more according to number. The "hasty installation" expedient has been adopted to obviate the inconvenience, the cost charged being ¥1,400 in Tokyo. In April 1920 the number-of-call system was introduced, 2 sen per call, which rate was raised to 3 sen later, and the yearly charge was reduced from ¥66 to 40 for Tokyo and Osaka. The average number of calls per connection has been cut down 30-50% since the innovation.

Number of Telephone Subscribers

End of	Sole subscribers	Joint sub's	Extension sub's	Total
1925	429,838	8,412	4,601	442,851
1926	481,495	8,961	4,337	494,793
1927	538,764	9,690	4,103	552,557

3. POSTAL SAVINGS

The Postal Savings first appeared in 1875. The law as it exists in force at present limits the deposits to ¥2,000 for one depositor. When the amount exceeds it, the Post Office, at the request of the depositor, purchases Government stocks or bonds with the excess, and keeps them on behalf of the depositor. The

rate of interest in Japan Proper was raised in April, 1915, from 4.2% to 4.5% per annum. (Vide Chap. Finance).

4. STATISTICS

Post and Telegraph Offices

End of	Post offices				Telegraph offices	
	1st class	2nd class	3rd class	Total	1st & 2nd class	others
1925	70	194	8,369	8,633	50	1,508
1926	70	196	8,439	8,705	51	1,545
1927	70	203	8,511	8,784	41	1,647

Ordinary Mail Matters (in 1,000)

		1922-23	1923-24	1924-25	1925-26	1926-27
Class 1.	Sealed	833,080	753,388	838,936	868,044	800,297
	Unsealed .	147,275	136,218	155,468	162,355	152,199
.. 2.	Cards	2,537,023	2,281,966	2,529,475	2,625,363	2,428,248
.. 3.	Periodicals.	326,985	285,154	309,696	318,620	300,159
.. 4.	Books	104,102	93,062	102,554	103,437	96,714
	Com. Papers	55,912	51,744	55,647	61,194	57,412
	Samples ..	11,033	10,083	11,336	11,787	11,174
.. 5.	Seeds	7,087	6,403	7,092	7,324	6,936
Frank		104,456	92,067	109,825	108,282	121,055
Total		4,126,958	3,710,089	4,120,032	4,266,410	3,974,193
Increase rate (%)		3.4	10.1	11.0	3.4	6.8
Per 10 population		716	634	697	714	665

The above statistics includes foreign mail matters, figures of which are tabulated hereunder:

Foreign Ordinary Mail Matters (in 1,000)

Number transmitted:	1922-23	1923-24	1924-25	1925-26	1926-27
Letters	10,590	10,828	9,677	10,335	11,467
Cards	2,879	2,772	3,103	2,688	2,946
Printed matter	6,472	7,748	6,469	7,433	7,484
Commercial Papers.	184	40	81	59	74
Samples	191	208	233	372	547
Frank	144	42	37	44	66
Total	20,472	21,640	19,603	20,954	22,584
No. arrived: Total.	21,212	30,021	26,465	29,555	35,092
Grand Total ...	41,684	51,661	46,068	50,509	57,676
Increase rate %..	3.7	23.9	10.8	9.6	14.2
per 100 population	72	88	78	86	97

Telegrams (in 1,000)

	1923-24	1924-25	1925-26		1926-27	
			of which wireless		of which wireless	
Despatched:						
Domestic (incl. Chinese):						
Charged	58,439	60,811	60,255	149	59,424	196
Frank	8,544	8,187	7,656	37	6,726	36
Total	66,983	69,038	67,911	187	66,150	232

	1923-24	1924-25	1925-26		1926-27	
			of which wireless		of which wireless	
Foreign:						
Charged	968	1,027	1,330	19	1,165	25
Frank	137	118	142	6	115	7
Total	1,105	1,146	1,473	25	1,280	32
Received:						
Domestic (incl. Chinese):						
Charged	58,914	60,890	60,298	61	59,544	75
Frank	10,432	9,419	9,322	73	8,870	92
Total	69,256	70,309	69,621	134	68,413	168
Foreign:						
Charged	1,021	1,060	1,340	8	1,211	12
Frank	147	131	151	3	122	4
Total	1,168	1,191	1,491	11	1,333	16
Grand Total:						
Charged	60,427	62,938	62,926	176	67,430	265
Frank	8,828	8,437	7,950	46	69,746	184
Total	69,256	71,375	70,876	222	17,176	449

Parcels Transmitted (in 1,000)

	1923-23	1923-24	1924-25	1925-26	1926-27
Ordinary	27,877	26,323	28,262	30,090	31,881
Registered	21,342	20,146	22,455	23,214	24,069
Declared	15	7	7	8	8
Frank	2,120	1,979	2,143	2,229	2,294
Grand Total	51,355	48,457	52,869	55,441	58,253
Of which foreign...	288	340	446	476	444
Increase rate %....	5.3	5.6	9.1	5.1	5.1
Per 10 population..	8.9	8.3	8.9	9.3	9.8

Postal Savings Deposits

The amount of deposits increased from ¥100 million in 1908 to ¥1,000 mill. in 1923, to rise to ¥1,130 mill. in July 1924, despite the earthquake disaster. Affected by the general economic depression setting in about that time the figure fell off next year.

End of Year	No. of depositors	Amount (Yen)	Per depositor (Yen)	Amount of Refundment (Yen)
1924	31,290,768	1,136,593,921	36.62	882,513,875
1925	31,320,163	1,136,969,440	36.30	878,559,251
1926	31,549,989	1,166,998,703	36.99	870,980,406
1927	34,038,270	1,523,037,800	44.74	—
*1928	33,333,000	1,678,759,000	47.88	—

* Figures for 1st half.

Classified by occupation the deposits are divided as follows (in 1,000):—

March	Agriculturists		School children		Trade people		Laborers and Employes	
	No. of persons	Yen	No.	Yen	No.	Yen	No.	Yen
1924 ..	10,720	356,720	5,570	75,800	3,170	162,130	2,290	68,570
1925 ..	11,049	370,163	5,743	78,610	3,268	168,112	2,358	71,094
1926 ..	11,130	379,940	5,785	80,686	3,293	170,552	2,376	72,972

Domestic Money Orders (in 1,000)

Dec.	No. issued	Amount	No. paid	Amount
1924	34,939	965,603	34,472	971,565
1925	34,671	947,542	31,501	827,620
1926	34,784	951,551	34,738	951,911

International Money Orders

Dec.	No. issued	Amount	No. paid	Amount
1924	60,794	4,622,639	144,288	8,538,607
1925	42,531	2,074,931	140,115	7,277,516
1926	44,888	2,176,230	140,578	7,104,475

Post and Telegraph Receipts (¥1,000)

	Postage stamps	Post	Telephone	Telegraph	Total incl. others
1923	73,377	17,399	12,886	45,783	149,634
1924	78,388	22,291	13,068	55,755	169,736
1925	82,242	23,687	13,208	90,204	209,618
1926	82,388	20,410	12,868	107,183	223,177

Post and Telegraph Service Expenses (¥1,000)

	Salary	Working	Refundments	Total incl. others
1923	14,034	96,130	9,430	119,608
1924	15,501	95,291	9,573	120,378
1925	14,802	98,447	9,199	122,462
1926	15,361	101,845	10,093	127,313

5. RESUME OF THE RULES IN OPERATION

Ordinary Mail Matters

Ordinary mail matters are classified into:—

1st class.—Letters:—For each 4 momme (=15 gr.) or fraction thereof, 3 sen.

2nd class.—Letter-cards:—3 sen. Post-cards:—single, 1½ sen; with reply paid, 3 sen.

3rd class.—Newspapers and periodicals, published at least once a month and registered at the post office concerned as third class mail matter:—For each 20 momme (=75 gr.) or fraction thereof, ¼ sen.

4th class.—Books, printed matters, photographs, commercial papers, pictures, specimens, written documents, maps, samples or specimens of natural history:—For each 30 momme or fraction thereof, 2 sen.

5th class.—Seeds of plants and flowers:—For each 30 momme or fraction thereof, 1 sen.

Any articles not falling under either of these classes, or those which are sealed, so that the inspection of the contents is impossible, are considered as first class mail matters and charged accordingly.

Dimensions. Not to exceed 1.3×0.85×0.5 shaku.

Weight.—1st class, no limit. 3rd, 4th (excluding samples with

max. of 100 momme) and 5th classes, up to 300 momme. Special treatment may be applied for in case of some specific mail matters. This is a method specially established for expediting the despatch, in a great bulk at one time, of newspapers, magazines and other kinds of periodicals and books. For this sort of mail matters, the postage is not required to be prepaid in postage stamps, instead the aggregate sum of all postage for all mail matters sent during the relative period is to be paid in cash to the post office at the end of a certain period.

Advertisement Post

This includes all sorts of printed matters intended as advertisements, such as hand bills, posters, etc., and destined to no particular addresses, but to be distributed by some means thought convenient within the postal district of the post office specially designated by the senders of such mail matters.

Telegraphs

From June 1920 the rate has been advanced about 30%, at the same time making address chargeable 5 sen. Additional revenue of ¥5½ millions is estimated to accrue.

(1) "Kana" telegrams (composed of Japanese "Kana") :—30 sen for first 15 "Kana" and 5 sen for each additional 5 "Kana" or fraction (for telegrams within the same city, or the same Post Office, the rate is reduced to 15 sen and 3 sen respectively).

(2) Roman-letters telegrams (composed of Roman letters) :—for first 5 words or less, 30 sen; for each additional word, 5 sen (for telegrams within the same city, or the same post office the rate is reduced to 15 sen and 3 sen respectively). In a plain language the length of a word is fixed at 15 characters, any excess being reckoned as an additional word. Groups of Arabic figures are reckoned in letter category of telegrams at the rate of five figures to a word, any fraction of five being reckoned as one word. In code language the maximum length of one word is fixed at 10 characters.

Words in a plain language in the text of a mixed telegram (plain and code language) are assimilated to the code words, and each counted at the rate of ten characters to one word, any excess being counted as one word.

Words combined or abbreviated against the usage of a language are counted according to their correct spelling usage.

(3) Special charge :—Urgent telegrams taking precedence in transmission over other ordinary telegrams are charged two times the rate of ordinary messages.

Telegraph Rate to Formosa, Korea, etc.

Fees for telegrams exchanged between Japan proper and Formosa, Manchuria, the Bonins, Saghallen and Korea:

(1) "Kana" telegrams :—For each 15 "Kana" or fraction, 40 sen, and for each additional 5 "Kana" or fraction, 5 sen.

(2) Roman-letter telegrams (between Japan Proper and Formosa, Korea, Manchuria, etc.) :—For each 5 words, 45 sen, and for each additional word, 5 sen.

Parcel Post

Weight:—A postal parcel sent from one place to another in Japan Proper as well that exchanged between a place in Japan Proper and Formosa and Saghalien, and between themselves, may weight up to 1,600 momme or 6 kilograms.

Dimensions:—Not to exceed 2 feet in length, breadth and the depth. If both the breadth and the depth do not exceed $\frac{1}{2}$ foot the length is allowed up to 3 feet.

Rates of Postage: (as revised and came in force from the 15th April, 1919):—(1) Domestic parcel post charges and (2) Charges for postal parcels exchanged between Japan Proper and Formosa, Saghalien, or between these territories:—

Up to,	(1) Domestic		(2) Colonial	
	Ord.	Reg.	Ord.	Reg.
200 momme	12 sen	18 sen	30 sen	45 sen
400 "	18 "	27 "	40 "	55 "
600 "	24 "	36 "	50 "	65 "
800 "	30 "	45 "	60 "	75 "
1,000 "	36 "	54 "	70 "	85 "
1,200 "	42 "	63 "	75 "	90 "
1,400 "	48 "	72 "	80 "	95 "
1,600 "	54 "	81 "	85 "	1 yen

Rates to Korea and to Manchuria and the South Seas are same as in the last column above.

Within a locality under the control of one and the same post office or within the same city:—Registered parcel, 12 sen, and Ordinary parcel, 6 sen, up to 1,600 momme or 6 kilograms.

Domestic Money Orders

Domestic money orders are classified into three, i.e., Postal Petty Orders, Ordinary Money Orders and Telegraphic Money Orders. The rates of the fee now in force are as follows in "yen":—

	Up to Yen 1.00	Up to Yen 5.00	Up to Yen 10.00	Up to Yen 15.00	Up to (Maximum) Yen 20.00	
Postal Petty Orders.....	0.03	0.05	0.07	0.10	0.13	
	Up to Yen 20.00	Up to Yen 50.00	Up to Yen 100.00	Up to Yen 150.00	Up to Yen 200.00	
Ordinary M. O.....	0.15	0.25	0.35	0.45	0.55	
Telegraphic M. O.....	0.50	0.55	0.90	1.10	1.30	
	Up to Yen 250.00	Up to Yen 300.00	Up to Yen 350.00	Up to Yen 400.00	Up to Yen 450.00	Up to Yen 500.00
Ord. M. O.....	0.65	0.75	—	—	—	—
Tel. M. O.....	1.50	1.70	1.90	2.10	2.30	2.50

In case of special telegraphic money order the fee is greater than the ordinary telegraphic money order by about 40%.

Foreign Mail Matters

The reduced fee schedule put in force from Oct. 1, 1925 is practically restoration to that of the pre-war system, and is as follows:—

Letters, 10 sen up to 20 grams; 6 sen for every additional 20 grams.

Postcards, single, 6 sen; return, 12 sen.

Printed matters, 2 sen up to 50 grams, and for every additional 50 gms.

Trade samples, 4 sen up to 100 grams; 2 sen for every additional 50 gms.

Registration, 10 sen for China; others, 16 sen.

Trade charge collection, 20 sen up to ¥20; 1 sen for every additional ¥2 or fraction thereof.

Foreign Parcel Rates

Destination	Up to 1 kg.	Up to 3 kg.	Up to 5 kg.
Argentina	¥ 1.36	—	¥ 2.40
Austria	¥ 1.18	—	¥ 1.98
Belgium	¥ 0.86	—	¥ 1.74
Brazil	¥ 1.72	—	¥ 2.60
Chili	¥ 1.16	—	¥ 2.04
France	Fr. 0.94	—	Fr. 1.74
Germany	Fr. 1.06	—	Fr. 1.94
Hungary	¥ 1.66	—	¥ 2.86
Italy	¥ 1.36	—	¥ 2.56
Netherlands	Fr. 1.18	—	Fr. 2.14
Peru	¥ 1.32	—	¥ 1.96
Spain	Fr. 1.16	—	Fr. 2.04
Switzerland	Fr. 0.98	—	Fr. 1.90
Union of S. Africa.....	¥ 1.72	¥ 2.48	¥ 3.08
French Indo-China	¥ 1.06	¥ 1.36	¥ 1.66
Great Britain	¥ 1.40	¥ 1.36	¥ 1.66
Straits Settlements	¥ 0.60	¥ 1.06	¥ 1.52
Malay States	¥ 0.80	¥ 1.42	¥ 2.04
Canada	¥ 0.60	¥ 1.00	¥ 1.40
Australia	¥ 0.80	¥ 1.70	¥ 2.60
Russia in Europe.....	¥ 2.62	¥ 3.10	¥ 3.50
Siam	¥ 1.40	¥ 2.00	¥ 2.60
Sweden	¥ 1.80	¥ 2.50	¥ 3.20
China.....	{ up to 266 momme		¥ 0.45
	" 533 "		¥ 0.60
	" 1,066 "		¥ 0.90
	" 1,599 "		¥ 1.20
	" 2,132 "		¥ 1.50
Mexico.....	{ up to 266 momme		¥ 1.00
	" 1,333 "		¥ 1.20
U. S. A.....	{ For each 120 momme		
	(1 lb.) or fraction		
	thereof		¥ 0.24
	Maximum 1,320 m. (11 lb.)		

N.B.—In the above table cheapest rate or shorter routes are given.

International Money Orders

Foreign money orders are transacted at any post office dealing with domestic money orders.

With the exception of those countries that have special provisions on the International Postal Treaty, the maximum sum is ¥400 per one order.

Ordinary order fee (excluding China) is 10 sen for each one order and 5 sen for each 10 yen or fraction.

For principal countries with relatively closer postal relations, the maximum amount that may be drawn, fee, etc. are as follows:—

Maximum amount		Ordinary order fee
Under Madrid Arrangement:		for intermediation
France*, French Indo-China, Greece*,		1. For China:
Italy*, Portugal	frs. 1000	Up to 5 yen... 5 sen
Argentina	p. 200	" 10 " ...10 "
Belgium*	frs. 1000	" 20 " ...15 "
Brazil	\$ 300	" 30 " ...20 "
Denmark*	k. 720	" 40 " ...25 "
Norway*	k. 1200	" 50 " ...30 "
Sweden*	k. 800	" 60 " ...35 "
Germany*	marks 30000	" 80 " ...40 "
Netherlands*	fls. 500	" 120 " ...45 "
Dutch East Indies*	fls. 480	" 150 " ...50 "
Roumania	lei. 1000	" 180 " ...55 "
Siam, Macao*	yen 400	" 210 " ...60 "
Egypt*, Spain*, Chili	£ 40	" 240 " ...65 "
Switzerland*	frs. 1000	" 270 " ...70 "
Under Agreement with the United Kingdom:		" 300 " ...75 "
Great Britain*, Honduras†, British		" 330 " ...80 "
Colonies and Possessions not men-		" 360 " ...85 "
tioned below†	£ 40	" 400 " ...90 "
Under Convention with the United States:		2. For all other
United States (incl. Guam,		countries:
Hawaii, Cuba†, Panama Canal		20 sen per 20 yen
Zone	\$ 100	or fraction thereof
Under Agreement with the Philippine		up to the first 40
Islands.....Philippine Islands		yen; above the in-
Under Convention with Canada.....		itial sum of 40 yen,
Canada	\$ 100	20 sen per 40 yen or
Under Agreement with Hongkong:		fraction thereof.
Hongkong, Australia†, India†, North		
Borneo†, Ceylon†, New Zealand†,		
Straits Settlements†, Federated		
Malay States†	yen 400	
Under Convention with Mexico.....		
Mexico	\$ 100	

N.B.—* Telegraphic Money Orders may be drawn on. For the issue of T.M.Os., ordinary telegram charges must be paid in cash in addition to the fees for Ordinary Orders.

† A small reduction is made from the face value of Order by the respective country acting as intermediary.

Sino-Japanese Postal Service

As agreed upon at the Washington Conference the Japanese post offices in China were all withdrawn at the end of 1922, and new arrangement was enforced on January 1st, 1923.

According to the new provisions the charges for ordinary letters, post cards, printed matters, etc. are the same as those for domestic mail, only the dimensions and weight are as same as the foreign mail.

Charges for letters and packages with declared value and parcel rates are as follows:—

Letters with declared value	{	for the first 300 franc			
		or ¥120	¥0.10		
	{	for every additional			
		300 franc or ¥120			
		and fraction	0.10		
Parcels with declared value	{	up to ¥120.....	0.20		
		for every add. ¥120			
		and fraction	0.10		
Parcels					
Up to	1 kg.	¥0.45	Up to	6 kg.	¥1.20
"	4 "	0.90	"	10 "	1.80

Limit of weight and dimensions for parcels:—Weight 10 kg.; dimensions, 55 cubic decimetres, not exceeding 1 m. 25 c.m. either in length, depth or breadth; 216 cubic when the destination is reached by railways or steamers.

Postal money order:—The maximum for money order is ¥400, the fee schedule being as follows:—

	Amount Yen	Fee sen		Amount Yen	Fee sen
Up to	10	10	Up to	150	50
"	50	30	"	300	75
"	90	40	"	400	90

N.B.—The telegraphic money order service is not yet available.

International Telegraph Rates

The rates for telegrams per word to places abroad are as follows (subject to alteration and rates vary according to routes of transmission):—

Asia	
Tongking	¥ 1.26
China proper	0.50
Hongkong	0.63
India	1.40
Shanghai, Amoy, Foochow.....	0.30
Singapore	1.14
Siam, Annam	1.44
Europe	
Russia in Europe, Caucasus.....	0.48
Other places except Russia.....	1.67
America	
San Francisco	1.44
Chicago	1.66
New York, Washington.....	1.74
Seattle	1.44
Vancouver, Victoria	2.08
Ottawa	2.24

**SKETCH MAP OF
LINES UNDER CONSTRUCTION
& LINES PLANNED**

— Open Lines
- - - Lines under construction
. . . Lines planned

Open Lines	7,993.2 miles
Under construction	508.3 "
Lines planned	2,479.6 "
(March 1927)	

.....
Lines planned

Open Lines 7,993.2 miles
Under construction ... 508.3 , ,
Lines planned 2,479.6 , ,
(March 1927)



Argentine Republic, Chili.....	2.73
Brazil	2.73
Peru	3.34
Oceania	
Australian Union	1.69
Honolulu (Bonin)	1.20
Manila	0.94

"Urgent" telegrams, taking precedence in transmission over other telegrams of the same class are charged three times the rate of ordinary telegrams.

"Deferred" telegrams, not requiring immediate despatch but transmitted in the intervals of the transmission of ordinary telegrams, are charged $\frac{1}{2}$ of the rate for ordinary messages.

Combinations or alterations of words against the usage of the language are not admitted.

The length of a word in plain language is limited to fifteen letters per word, any excess being charged for as an additional word.

In code language the maximum length of a word is fixed at ten letters each.

Groups of figures are reckoned at the rate of five to a word, any fraction of five being reckoned as one word.

Words in plain language in the text of a mixed telegram—i.e., composed of words in plain language and words in code language are each counted as one word up to ten letters, and being counted as one word.

CHAPTER XXIII

RAILWAYS

1. INTRODUCTORY REMARKS

The advent of the nationalized system and the removal of various drawbacks incidental to diverse managements and different methods of working marks a new epoch in the history of Japanese railway business. The memorable plan was realized in the two years of 1906 and '07, the Government acquiring in consequence seventeen leading private lines representing 2,823 m. out of the total private mileage of 3,248 then existing. The total Government lines on the completion of the railway nationalization extended about 4,340 miles, roughly three times their former length 1,518 miles, while the invested capital grew from ¥170,000,000 to ¥700,000,000.

The capital invested up to April 1927, was ¥2,688,669,616 and the annual net profit for one year ending March, 1927, was ¥130,907,279. The figures showing the rate of profit accruing from the railway working for the last five years are as follows:—

1922-23	10.1%
1923-24	8.5%
1924-25	8.8%
1925-26	8.8%
1926-27	7.9%

The Nationalization Program as Worked out

The Railway Nationalization Program that had been thrown out repeatedly by the Diet was at last adopted by the 22nd session (1905-'06). Seventeen lines were purchased in 1906 and '07 with domestic loan bonds issued at 5% for the purpose. The lines represented 2,823 m. 9 ch. open with the capital invested amounting to ¥108,763,000 in round numbers. The price paid for the lines was ¥481,981,000 approximately. It was determined in this way. First the average rate of profit against the cost of construction during the last six half terms was taken. Twenty times that rate multiplied to the cost of construction existing at the date of purchase was the purchasing price plus the cost price of shares that existed at the time of purchase. For those railways that had not yet passed six business terms since their opening, the cost of construction, when it did not come up to the purchasing price, was made as purchasing price.

In the financial arrangement of the State, the Government Railways is set apart as special account, and all disbursements for construction, working, improvement, etc. are to be met by the receipts and profit accruing from the railway traffic.

The railway lines in Japan proper are of narrow gauge, but the Railway Management is doing its best to effect within this

limit innovation in passenger and other service as regards comfort, speed, and safety.

The Passenger and Goods Rates

On the completion of the railway net as designed by the Government, the Railway Management took up the question of revising passenger and goods tariffs that had been on diverse systems peculiar to each company. The passenger tariff was thoroughly revised in November, 1907, adopting the tapering system on all the lines, though considerations relating to local conditions and competition prevented the fundamental unification of the goods tariff.

In 1907 the diverse passenger rates, 2 on State and 17 on purchased lines, were superseded by the uniform system as adopted on the occasion. The rate per mile was reduced, except for 1-50 m. journey, by 1 sen for the 3rd class; 25% for the 2nd and 50% for the 1st. In 1918 and again in 1920, they were raised as mentioned elsewhere. As it stands at present, the passenger fare for the 3rd class is 2.5 sen up to 50 miles, 2.1 sen under 100 miles, and from 1.7 sen to 1 sen for distances over 100 miles.

Next in October, 1912, the goods tariff was placed on a uniform basis on all the Government lines except the San-yo line. The repeated revisions since effected have not only simplified transactions, but also proved beneficial to all travellers and shippers. The rates have been raised thrice, in 1918 (20%), in 1920 (18% for ferry service only), and in 1921 (28%). Taking the car-load consignment of minerals as basis of comparison, the rate per ton for 100 m. becomes thus; ¥2.7 before the nationalization and ¥1.89 in 1916-17.

The New Construction Law

The Railway Construction Law as enacted in 1891 and which had been in force ever since with some revisions, was replaced by a new law that was carried through the regular session of the Diet in March 1922 and put in force on April 10th. The new law embraces a construction scheme that covers 149 new lines to be laid by the Government in the future in Japan proper, with the total length of 6,349 miles. The period in which they are to be completed and their cost are to be determined on each occasion with the approval of the Diet. Any alteration in the program must be discussed by the Railway Council.

2. GENERAL STATISTICS ON RAILWAYS

End of March	Railway mileage open to traffic		
	State m. ch.	Private m. ch.	Total m. ch.
1923	7,014.10	2,348.00	9,362.10
1924	7,350.54	2,658.28	10,009.02
1925	7,558.44	2,855.70	10,414.34
1926	7,837.08	3,047.26	10,884.34
1927	8,007.69	3,320.48	11,328.37

Year ended March	State railways		Private railways open to traffic	
	Capital invested from beginning (Yen)	Profit percent. to capital	Capital (Yen)	Profit percent. to cost of construction
1923	1,978,915,868	10.1	420,752,953	9.6
1924	2,149,783,769	8.5	495,916,997	8.1
1925	2,323,210,254	8.8	592,995,605	7.9
1926	2,500,154,609	8.8	668,082,042	7.2
1927	2,688,660,616	7.9	766,612,592	9.6

3. THE GOVERNMENT RAILWAYS

Administration and Staff

For convenience of administration the Government Railways are divided into six divisions, i.e., the Tokyo, the Nagoya, the Kobe, the Moji, the Sendai and the Sapporo.

The central administration is the Railway Department which is composed of the Minister's Secretariat and seven bureaux, Private Railway Administration, Traffic, Construction, Way & Works, Mechanical Engineering, Electric and Finance, and is presided over by the Minister assisted by the Vice-Ministers and a large number of subordinates.

The system of administration underwent several modifications, in 1910, 1913 and 1919. In May, 1920, it was further re-organized and the Railway Board was elevated in status and made a regular Department of State. Then in June 1921, the Electric Bureau was newly created and the office of Engineer-in-Chief was abolished.

On March 31st, 1927, the staff comprised 200,500 officers and employees, classified as under.

Superintending officers and engineers.....	864
Clerks and junior engineers.....	19,504
Employees	69,573
Subordinate employees	110,559
Total	200,500
Increase over the previous year.....	4,624

Mileage

The mileage of lines worked and length of tracks on March 31st, 1927 are given below in comparison with the preceding year.

Division	Route				Tracks	
	Single track m. ch.	Double track m. ch.	Triple and over m. ch.	Total m. ch.	Main m. ch.	Total incl. others m. ch.
Tokyo	652.16	341.33	34.73	1,029.02	1,483.49	2,229.01
Nagoya	824.33	195.29	6.75	1,026.57	1,235.76	1,776.39
Kobe	1,149.33	272.61	15.59	1,437.73	1,757.71	2,386.11
Moji	1,223.54	200.43	7.04	1,431.41	1,649.16	2,316.08
Sendai	1,504.58	15.76	—	1,610.54	1,626.50	2,185.36
Sapporo	1,339.16	132.66	—	1,472.02	1,604.68	2,139.48
Total	6,783.59	1,158.68	64.11	8,007.69	9,358.10	12,032.63
Do. 1925-26.	6,668.07	1,126.68	51.53	7,837.08	9,115.55	12,619.60

Main Lines and Mileage under Traffic, end of Mar., 1927

Name of principal lines	Open mileage	Name of principal lines	Open mileage
Main Island:		Nippo line	421.9
Ban-etsu line.....	174.8	Sendai	90.7
Central	304.5	Shikoku:	
Hokuroku	357.6	Kochi line.....	35.7
Kwansai	349.1	Sanuki	125.7
O-u	428.8	Takamatsu-	
Riku-u	102.6	Tokushima	17.2
San-in	457.4	Tokushima	52.9
San-yo	590.8	Hokkaido:	
Shin-etsu	254.2	Abashiri line.....	217.1
Sobu	264.0	Hakodate	345.4
Tohoku	1,139.7	Muroran	147.6
Tokaido	604.3	Nayoro	97.0
U-etsu	179.4	Nemuro	338.1
Kyushu:		Rumoi	41.5
Chikuho line.....	77.3	Soya	281.2
Kagoshima	353.0	Total	7,993.2
Nagasaki	148.7		

Railway Finance

The Government railway finance has been set apart as an independent account since the 1909-10 year. The capital is to consist of the investment already made or to be made in future and the stores fund. All the disbursements are to be met with the receipts while the expenses needed in construction or improvement are to be met from the profit accruing from the traffic, and also from ¥20,000,000 to be set apart every year on the railway account or from Government general account.

Disposition of Net Earnings (in ¥1,000)

Year ended March	Additional works	Survey and Private line inspection	Interest charge	Subsidy to light rlys.	Net profit
1923	8,543	343	57,982	1,564	131,529
1924	6,385	354	62,858	2,219	110,264
1925	6,218	377	65,295	2,989	129,819
1926	5,685	334	67,932	4,153	143,259
1927	5,443	433	71,139	4,963	130,902

Construction and Improvement Expenditure

Year ended March	Construction (Yen)	Improvement (Yen)
1923	68,044,798	138,512,731
1924	64,496,320	121,013,097
1925	57,291,734	132,640,787
1926	44,772,191	145,409,079
1927	47,953,430	153,274,029

Traffic Mileage

Year ended March	Average working mileage	Passenger mileage 1000	Ton mileage 1000
1923	6,850.8	9,760,777	6,804,957
1924	7,130.1	10,669,134	6,392,329
1925	7,439.9	11,250,551	7,047,680
1926	7,697.6	11,645,130	7,226,687
1927	7,918.4	11,953,203	7,265,266

Working Revenue and Expenses

Year ended March	Revenue Yen 1000	Expenses Yen 1000	Profits Yen 1000	Per mile per day worked (Yen)		
				Revenue	Expenses	Profits
1923	429,594	229,778	199,816	171.80	91.89	79.91
1924	443,355	261,242	182,113	169.55	99.91	69.64
1925	470,931	266,233	204,699	173.41	98.03	75.38
1926	480,451	259,440	221,011	170.10	92.34	78.66
1927	484,083	270,839	213,244	167.49	93.71	73.78

Working Revenue Classified (¥1,000)

Year ended March	Coaching	Goods	Total incl. sundries
1923	237,446	183,573	429,594
1924	255,284	181,182	443,355
1925	264,726	199,257	470,927
1926	268,223	204,434	480,451
1927	268,386	196,001	464,387

Working Expenses Classified (¥1,000)

Year ended March	1925	1926	1927
General	10,099	9,224	9,438
Maintenance of way and works....	57,165	54,939	58,074
" of equipments	27,062	26,330	27,228
Transportation	75,552	73,517	75,752
Traffic	81,083	80,378	85,226
Shipping	8,349	7,948	7,416
Total incl. others.....	266,233	259,440	270,839

Railway Working and Shipping Receipts (¥1,000)

Year ended March	1923	1924	1925	1926	1927
Railway working ...	411,395	427,579	453,374	460,574	467,595
Shipping	9,321	9,677	9,896	11,095	11,383
Total	420,716	437,251	463,270	471,669	478,978

Passenger Traffic:—The fare scale was twice revised, in July 1918 and Feb. 1920, so that as compared with the pre-war tariff, it has been increased by 50 per cent. on an average. As it stands at present the 3rd class fare for a mile is 2.5 sen up to 50 miles; 2.1 under 100 miles; 1.7 under 200 miles; 1.4 under 300 miles; 1.2 under 400 miles; 1.1 under 500 miles; 1.0 above 500 miles, with the 2nd and 1st class fares twice and 3 times as much as 3rd class. Ordinary express charges are ¥0.65, ¥1.30 and ¥2.00 for respective classes below 250 miles, ¥1.00, ¥2.00 and ¥3.00 below 500 miles, ¥1.25, ¥2.50 and ¥3.75 above 500 miles, these being doubled in case of the limited express composed of 1st and 2nd classes only.

Passenger Earnings (¥ 1,000)

Year ended March	1923	1924	1925	1926	1927
1st class	1,126	1,981	1,048	1,012	946
2nd class	28,255	25,898	25,667	24,147	23,775
3rd class	170,369	187,691	195,520	200,697	203,946
Total	199,877	214,570	222,236	235,856	228,667

Passengers Carried, etc.

Year ended March	No. of pass. carried (1,000)	No. of pass. carried 1 mile (1,000)	Average miles of journey per pass.	Pass. per day per mile	Pass. per train mile
1923 ...	512,755	9,760,777	19.0	3,945	206.6
1924 ...	576,472	10,669,134	18.5	4,130	216.1
1925 ...	635,454	11,250,561	17.7	4,182	209.2
1926 ...	677,086	11,645,140	17.2	4,183	206.2
1927 ...	735,706	11,953,203	16.2	4,174	197.9

Ratio of Passengers per 1,000 by Class

Year ended March	1921	1922	1923	1924
1st class	—	—	—	—
2nd class	45	40	35	29
3rd class	955	960	965	971

Goods Traffic.—Goods acceptable for transportation are divided into five classes. Principal items are coal, timber, stone, rice, manures, and fuel. During the year 1927, the 70 principal items hauled by the State lines amounted to 66,726,007 tons, of which the items named below constituted the following:—

Rice	2,923 (1,000 tons)	Ballast	2,930 (1,000 tons)
Wheat	640	Coal	22,105
Timber	6,181	Minerals	1,761
Charcoal	1,268	Fertilizers ...	1,000
Stone	713	Cement	1,371

Goods Earnings (¥1,000)

Year ended March	1922	1923	1924	1925	1926	1927
Ordinary	38,779	41,291	40,302	41,633	42,743	44,147
Express	2,377	2,077	2,230	2,035	1,921	701
Carload	124,878	134,433	134,032	149,362	152,504	155,367
Total	166,034	177,801	176,564	193,030	197,168	200,215

Tonnage of Goods (1,000 tons)

Year ended March	1922	1923	1924	1925	1926	1927
Ordinary	5,995	6,326	6,262	6,311	6,449	6,415
Express	137	130	140	120	112	27
Carload	51,262	57,615	58,380	63,626	65,378	67,161
Total	57,394	64,071	64,782	70,057	71,939	73,603

Aggregate Ton-mileage of Goods Hauled (1,000 m.)

Year ended March	1923	1924	1925	1926	1927
Ordinary	696,315	689,160	718,929	738,177	755,911
Express	22,570	25,337	22,668	21,205	6,689
Carload	5,646,072	5,677,830	6,306,083	6,467,305	6,502,666
Total	6,364,957	6,392,329	7,047,680	7,226,687	7,265,266

ROLLING STOCK**Locomotives**

The next summary gives the number and weight of engine stock in use during the last few years ending March 31, 1925:—

Year ended March 31	Steam		Electric	Total number	Weight in working order (with tenders)	Average weight per engine	Average no. per 10 open miles
	Tank	Tender					
1921 ..	1,196	2,088	22	3,306	209,523	63.4	5.4
1922 ..	1,201	2,293	24	3,518	227,809	64.8	5.2
1923 ..	1,188	2,454	29	3,671	242,600	66.1	5.4
1924 ..	1,180	2,617	50	3,847	259,110	67.3	5.4
1925 ..	1,209	2,707	65	3,981	271,859	68.3	5.3
1926 ..	1,168	2,662	77	3,907	274,716	70.3	5.0
1927 ..	1,158	2,718	89	3,965	285,989	72.1	5.0

Number of Passenger Carriages

Year ended March	No.				Seat. Cap'y		
	Boyle	4-wheel	Trams & motor cars	Total	Total	Avg'e per car	Avg'e per 10 open m.
1921 ..	3,765	3,999	290	8,072	370,383	45.9	12.5
1922 ..	4,245	3,945	385	8,575	408,514	47.7	13.0
1923 ..	4,993	3,872	433	9,298	460,761	49.6	13.6
1924 ..	5,336	3,695	462	9,493	477,035	50.3	13.3
1925 ..	5,927	3,484	642	10,053	523,046	52.0	13.3
1926 ..	6,424	3,150	734	10,308	551,451	43.5	13.2
1927 ..	6,947	2,289	822	10,058	560,313	55.7	12.6

Number of Goods Wagons

Year ended March	Number			Capacity (ton)		Avg'e no. per 10 open miles
	Covered	Open	Total	Total	Avg'e per vehicle	
1921	25,500	26,699	52,199	596,810	11.4	78.1
1922	26,123	26,369	52,492	614,330	11.7	77.2
1923	29,295	26,110	55,405	664,711	12.0	76.0
1924	29,789	27,021	56,810	692,362	12.2	79.5
1925	30,626	27,256	57,882	712,559	12.3	76.7
1926	31,705	27,902	59,607	744,032	12.4	76.2
1927	33,691	28,206	61,897	774,748	12.5	77.4

Construction and Operation

Speed, Carrying Capacity, etc.—The maximum carrying capacity of a train on the Tokaido and San-yo lines is 475 tons for the passenger traffic and 900 tons for the freight traffic. The fastest speed developed is that on the Tokyo-Yokohama section, being 48 miles an hour. In the long distance running, the typical record is that between Tokyo and Shimonoseki 702.8 which is covered in 23 hrs. 15 mins. by the up train, and in 22. 55. by the down train.

The Gauge.—The gauge is of 3 ft. 6 ins., that having been adopted when the first railway in Japan was laid. The rails used being generally 60 pounds, in speed and carrying capacity Japanese railways are much behind those in Europe and America. As yet with the exception of the Tokaido line, most of the lines are in a single track. In the San-yo, Tohoku and a few other lines, however, partial doubling has either been effected or is in course of completion.

Gradient.—The maximum gradient is 1 in 40 in ordinary cases with a minimum radius of 15 chains. A notable exception is

the case of the Usui pass on the Tokyo-Nagano line for which the Abt system was adopted. The gradient for it is 1 in 15, for the section of 7 miles from Yokogawa to Karuizawa, with a minimum radius of 13 chains. There are 26 tunnels with the aggregate length of 14,645 ft. Altogether this section forms the worst portion in the whole work of railway construction in Japan. The steam locomotives at first used on this section have been recently replaced with electric locomotives with the double object of increasing the hauling power and of getting rid of the nuisance of smoke. The change has proved highly satisfactory.

Tunnels.—In regard to tunnelling work, there are 18 tunnels of over 2,500 ft. That bored at Sasago on the Tokyo-Shiojiri of the Central line is the longest, 15,276 ft., and required about six years, being opened to traffic in February, 1893. Two tunnels much longer than the Sasago are now under construction, i.e. the Shimidzu tunnel 31,814 ft. on the Joetsu line, and the Tanna tunnel 25,614 ft. on the Atami line.

Rails.—Rails used are in most cases 60 lbs. per yard steel rail, but they are to be replaced by the 75 lb. type for trunk lines, in view of the steady expansion of the volume of traffic and the necessity in consequence to run heavier trains. The rails formerly used to come from abroad, but of late the rails turned out at the Government Steel Works at Wakamatsu, Kyushu, and some other works are used.

Sleepers.—The standard dimension of sleepers is 8" \times 5½" \times 66'0", and 14 to 16 are laid for every 30 ft. of rails. Chestnut wood is predominant, but owing to growing scarcity of this particular lumber, softer varieties as pines, "tamo," *cercidiphyllum*, "sen," beech, etc., are mixed, after they are properly creosoted.

Bridge Work.—The longest structures are first that over the river Akano (4,077 ft.) on the Murakami Line, the second over the Tenryu (3,967 ft.) and the third over the Oi (3,332 ft.), the latter two being on the Tokaido Line. The foundation work for all such bridges is in the shape of cylindrical brick wells with steel girders. In rare cases wrought iron girders used in bridges made in the early days of railway construction in Japan are mixed with them.

The Adoption of Automatic Couplers

Before July 1925 it was only in Hokkaido that automatic couplers were in use, but the necessity of increasing the carrying capacity to cope with the growing traffic has resulted in the replacement of screw couplers with automatic couplers. In the Main Island, Kyushu and Shikoku the change was simultaneously effected for both the State and private railways, according to the plan drawn up in 1918, and the Government Railway Administration subsidized the private railways to the extent of one half the expense involved. In order to carry out the innovation with the minimum of interruption in the regular train services, the passenger cars had their couplers changed gradually in the first half of July, 1925, while the rest of the rolling stock was subjected to similar treatment on two different days, viz., July 17 in the Main Island and on the Sanuki line in Shikoku, and July 20 in Kyushu.

The recoupling of passenger cars was done at terminal stations during the hours when cars were laid up for their next

service. All freight cars were collected at about 220 important stations before the midnight preceding the days appointed for the work. 2,500 employees working in the engine sheds and car inspection offices, as well as 9,500 employees in the workshops, altogether 12,000 employees were mobilized for the work, which was accomplished at the rate of 3.5 cars per person.

The work covered 3,200 locomotives, 8,400 passenger cars, and 52,000 freight cars of the Government Railways, 5,800 cars of private railways, and 800 private freight cars, and the expenditure amounted to ¥25,000,000, or at the rate of ¥393 per car. The automatic couplers adopted were of three patterns, i.e. Shuron, Alliance and Sakata (Japanese).

Ferry Service between Aomori and Hakodate

The adoption of automatic couplers on the Government lines in August, 1925, was followed by a radical improvement in the ferry service between Aomori and Hakodate.

It should be stated that freight car ferries were already running between the Main Island and Kyushu and Shikoku, but before the change of couplers similar facilities were impossible between the Main Island and Hokkaido, owing to the distance, 60 nautical miles from Aomori to Hakodate, and the sea also being often very rough. Four sister ships each of 3,500 tons, with 17 knots speed were accordingly built and put in service on August 1, 1925, to make four trips daily in both directions. They cost ¥1,600,000 and the total spent on the four boats and equipment at the terminal ports amounted to ¥4,800,000.

Railway Stores and Materials

All the Government railway cars are generally supplied at home either by having them built at their own works with necessary materials procured from approved foreign makers or by placing orders with the three leading carriage works in Japan, viz., Osaka Railway Car Co., Nagoya Railway Car Co., and Amano Works in Tokyo. Orders placed with foreign works for supply of locomotives and other railway materials generally amount to between 10 and 20 million yen a year.

Domestic and Foreign Orders and their Percentage

During the last few years the materials purchased by the Government Railways are estimated to have been as follows, in ¥1,000:—

	Home purchase	Foreign purchase	Total	Percentage of foreign purchase to the total
1922	127,207	11,719	138,926	6.9
1923	—	—	—	—
1924	156,662	5,209	161,871	3.2
1925	166,273	7,063	173,336	4.2
1926	155,006	3,069	158,075	1.9
1927	170,805	3,273	174,078	1.9

N.B.—Data for 1923 are not available owing to the total loss of documents in the 1923 catastrophe.

Loading Approved Foreign Makers

Berliner Maschinenbau A.-G. Arthur Koppel A.-G.

Hawthorn Leslie & Co., Ltd.	Hohenzollen A.-G. für Loko-
Humboldt Engineering Works	motivbau
Co.	Krauss & Co.
J. A. Maffel, München.	Rogers Loco. Works of A.L.C.
Robert Stephenson & Co.	La Societe John Cockerill,
Beyer Peacock & Co.	Belgium.
Brooks Loco. Works of A.L.C.	Schneider & Cie, Creusot.
Cooke Loco. Works of A.L.C.	Societe Francaise de Construc-
Pittsburgh Loco. Works of	tion Mechaniques.
A.L.C.	Maschinenfabrik Esslingen,
Schenectady Loco. Works of	Esslinger.
A.L.C.	The North British Loco. Co.
Hannoverische Maschinenbau	Vulcan Foundry.
A.-G.	Kitson & Co., Leeds.
Henschel & Sohn, Kassel.	.

4. PRIVATE RAILWAYS

The railways under private management are under the control of the Local Railway Law which came into force in August 1919, replacing the Laws relating to Private and Light Railways. The 'Local' railways under the new Law include all the light railways privately operated, these numbering 219 at the end of March 1927 with an aggregate open mileage of 3,337.58 and the total capital invested of ¥766,612,592.

Below are given results of working of the local railways in Japan proper for the year ended March 31, 1927, compared with the two preceding years:—

Year ended March	1927	1926	1925
Number of railways.....	219	202	187
Open mileage	3,337.58	3,047.26	2,855.70
Capital invested	766,612,592	668,082,042	592,995,605
Cost of Construction.....	492,086,083	395,847,657	337,031,508
Revenue (yen)	61,548,146	61,564,176	57,674,167
Working expenses (yen).....	34,267,864	34,269,061	31,956,043
Profit (yen)	27,280,282	27,295,115	25,718,124
Percentage of profit to cost of construction	7.2	7.5	8.1
Locomotives	822	809	777
Passenger carriages	2,762	2,689	2,520
Goods wagons	9,439	9,380	9,219
Passengers carried	233,826,575	231,817,720	208,296,113
Passengers carried one mile (in 1,000)	11,953,203	11,645,130	11,250,551
Earnings from passenger traffic (yen)	37,821,032	36,869,384	34,878,159
Tonnage of goods hauled....	18,474,840	18,385,034	17,769,912
Tonnage of goods hauled one mile	7,265,266,466	7,226,686,969	7,047,680,468
Earnings from goods traffic (yen)	18,921,175	18,869,384	18,207,646
Train mileage	14,403,337	13,799,893	13,662,033
Vehicle mileage { locomotives..	15,707,378	15,517,319	15,465,991
passengers .	87,891,594	85,836,120	80,547,850
goods	60,870,134	59,544,683	58,215,320
Employees	29,456	29,821	27,360
Aggregate monthly compensation of employees (yen)...	10,416,094	10,062,833	9,883,003

Leading Local Railways in Japan (On July 1st, 1927)

Title	Office	Length of lines open m.	Motive power	Gauge ft. in.	Paid up cap. (Yen 1,000)
Bantan	Rly. Kakogawa	55.7	electric	3.6	6,000
Chichibu	„ Kumagai	39.6	elect. & steam	3.6	12,000
Chugoku	„ Okayama	49.5	steam	{ 3.6 2.6	4,300
Echigo	„ Niigata	60.9	„	3.6	4,500
Fuji-Minobu	„ Tokyo	26.9	elect. & steam	3.6	16,000
Geibi	„ Hiroshima	56.2	steam	3.6	6,000
Hokkaido	„ Tokyo	79.9	„	3.6	10,000
Ibigawa Elect.	„ Tokyo	35.8	steam & elect.	3.6	18,500
Iwate Keiben	„ Hanamaki	40.7	steam	2.6	1,500
Iyo	„ Matsuyama	27.3	elect. & steam	{ 3.6 2.6	28,312
Joso	„ Mizukaido	31.9	steam	3.6	1,250
Kokura	„ Kokura	24.9	„	3.6	4,520
Musashino	„ Hanno	27.2	„	3.6	6,000
Nagoya—1	„ Nagoya	24.9	electric	3.6	1,400
Nagoya—2	„ „	13.1	„	3.6	12,305
Nankai	„ Osaka	77.9	electric	3.6	70,000
Omi	„ Aonami	27.5	elect. & steam	3.6	1,500
Shimabara	„ Shimabara	26.3	steam	3.6	1,200
Tobu	„ Tokyo	150.7	elect. & steam	3.6	50,000
Tomakomai	„ Tomakomai	25.5	steam	2.6	500
Tsukuba	„ Makabe	24.9	„	3.6	1,500

5. ELECTRIFICATION OF RAILWAYS

Lines in and around Tokyo, etc.

The first railway line in Japan on which electric traction was applied was the city portion of the Central Line (formerly Kōbu Railway, acquired by the Government in 1906). The conversion was effected in 1905 between Manselbashi, then the metropolitan terminus of the line and Nakano on the outskirts of Tokyo, a distance of 8 miles. Later on the Line was extended to Tokyo Station on one hand and to Kokubunji on the other. Next the Yamate Line, which is a suburban belt line of Tokyo, was similarly converted in 1910. The distance is 19.3 miles besides the 3.5 mile Ikebukuro-Akabane branch.

The electrification of the Tokyo-Yokohama Line, 19.2 miles, was started in 1912 and completed in 1915. A double track was newly laid for electric operation. The total mileage of electrified sections in and near Tokyo has reached 57. Multiple unit trains each composed of 5 bogie cars are run in the rush hours both morning and evening with a leadway of 3 minutes. A new elevated section which connects Tokyo and Ueno stations, two grand terminals in the city, was opened to traffic on Nov. 1, 1925, and this section runs through the heart of the city. It has immensely facilitated communication between the inside and suburbs of the metropolis.

Tokaido Line

The scheme drafted by the Railway Department for electrifying the whole Tokaido Line (365 m.) at estimated cost of ¥67,000,-

000 in seven years commencing 1923, has been postponed except for Yokosuka branch in consequence of the earthquake and the necessity to adopt curtailment policy in finance. According to the original program electric locomotives to be used are 8 for express passenger trains, 9 for ordinary passenger trains, and 25 for freight trains making the total of 42. All the locomotives have passed trial running. Besides these, 4 for express passenger trains, 6 for ordinary passenger trains and 4 for freight trains, or altogether 14 locomotives have been newly ordered. The power is to be supplied by private companies for the time being, but a scheme has been established for building a water power station of 150,000 k.w. and another with 60,000 k.w. steam power. Substations have been established at 5 different points along the line. The required machines have been installed and their tests have been conducted at the substations.

The Usui Pass, Shin-etsu Line

The Abt rackrail section across the Usui Pass is located 3,000 ft. above sea-level, and the difference in level amounts to 1,817 ft. in a length of 6.9 miles. This steep section was electrified in 1912. There are at present 26 electric locomotives which operate 11 passenger trains and 18 freight trains daily in each direction. The power is supplied by a power station at Yokogawa, specially erected for the purpose and containing three 1,000 k.w. vertical turbo-generators. There are substations at the highest and the lowest point of the rack section.

6. INTERNATIONAL TRAFFIC ARRANGEMENTS

With Russia and Europe

With the trans-peninsular railways of Chosen opened in 1905, and the reconstruction of the South Manchuria Railway completed on the Dairen-Changchun line in 1909, and the Antung-Mukden line in 1911, it was possible to open in 1912 through Trans-Siberian railway service between Japan and Western Europe via Russia, with the co-operation of some steamship concerns. The different international through services, those with Siberia and Europe restored in 1927, are described below:—

(1) **Through Passenger Traffic between Japan and North Manchuria and the Maritime Province.**—The service was established in 1st April, 1910, between the Chinese Eastern Railway and the Russian Volunteer Fleet on the Russian side, and the Japanese Railways, the South Manchuria Railway, and the Osaka Shosen Kaisha on the Japanese side, and was joined by the Chosen Railways two years later. The service gives option of travelling between Japan and Harbin by any of the three following routes:—

(a) via the Chosen, the South Manchuria, and the Chinese Eastern (North Manchuria) Railway lines; (b) via Dairen route, on the South Manchuria Railway and the Chinese Eastern Railway lines; (c) via Vladivostok route, on the Ussuri Railway line (the Maritime Province).

(2) **Through Goods Traffic Service with Russia.**—This through goods traffic between Japan and Russia was brought about in January, 1914, and is limited in scope, covering North Manchuria and the Maritime Province on the Russian side.

Restored Trans-Siberian Through Passenger Service.—After the suspension lasting about 14 years the Trans-Siberian through passenger service was reopened on Aug. 1, 1927, though not as completely as before. Of the two Trans-Siberian routes only that via Riga is now available, though at present terminating in that city. The other route via Moscow requires further arrangement among the parties concerned before it can be officially reopened. The German tourist agency Derutra is said to have been chiefly instrumental in effecting this partial restoration of the service, and it is on behalf of that agency that the Japan Tourist Bureau is handling the booking business on this side. For the journey westward from Riga, to Berlin, Paris or London, the necessary arrangement being in force, no inconvenience is experienced by through passengers travelling on the routes. Services and approximate fares between London and Tokyo are as follows:—

London-Tokyo	No. of services	Days required
Via Fusan route.....	Twice weekly	17 days
„ Dairen route	Twice weekly	18-19 days
„ Vladivostok route	Once weekly	20 days

Fares including Express and Sleeping-berth charges.

	1st class	2nd class
London to Tokyo (via Warsaw and Fusan)	\$340	\$230
Paris to Tokyo („ „ „ „)	\$330	\$225
Berlin to Tokyo („ „ „ „)	\$295	\$195
Moscow to Tokyo („ „ „ „)	\$230	\$145

Japan-China Through Passenger and Luggage Service

Participated in by—Japanese State Railways, South Manchuria Rly Co., Chinese State Railways, Nippon Yusen Kaisha, Osaka Shosen Kaisha, Harada Kisen Kaisha, Nisshin Kisen Kaisha, Indo-China Steam Navigation Co., China Navigation Co.

Kind of Service.—(A) Single and return trips, 20% discount for railways and 10 for steamships for return trips. Three routes are available, via Chosen, Shanghai (single trips only) and Tsingtao.

(B) Circular trips (30% dis. for railways and 10 for steamships).—The service started in Oct. 1915 for the benefit of 1st class passengers on board an ocean-going steamer on an extended tour embracing the Yokohama-Shanghai section either via Pukow or Hankow but preferring to cover it by rail.

(C) Party travellers—ordinary and student parties, discount 25 to 50%.

(D) Through Parcel service—participants same as for the through passenger and luggage service, and two routes, via Chosen and via Tsingtao, are open.

7. TRAMWAYS

The Japanese tramways date back to 1880, when an application was tendered for the construction of the Tokyo Horse Tram Co.'s line. It was completed and opened for traffic in 1883. The first electric tramway in Japan was laid in Kyoto and was opened to traffic in January, 1896. The following shows the results of working of the tramways during the five years ending March, 1925.

Year ended March	No. of Tramways	Mileage m. ch.	Capital (Yen 1,000)	No. of passengers carried (1,000)	Goods hauled (1,000 tons)	Revenue (Yen 1,000)	Working expenses (Y. 1,000)	Profit (Yen 1,000)
1921	.... 139	1,320.60	659,585	1,271,607	2,312	87,055	55,760	31,294
1922	.... 137	1,360.50	915,721	1,394,664	2,081	101,374	56,379	44,995
1923	.... 140	1,400.68	1,181,575	1,551,282	2,232	113,419	62,812	50,628
1924	.... 142	1,469.76	1,412,790	1,562,817	2,334	110,372	65,421	44,951
1925	.... 143	1,530.04	1,485,942	1,706,262	2,392	121,059	68,101	52,958
1926	.... 151	1,578.49	1,582,375	1,714,200	2,126	129,550	75,811	53,738

Municipal Tramways in Tokyo and Osaka

In such larger cities as Tokyo, Osaka, Kyoto and Nagoya, there are, besides electric trams in the urban area, several lines connecting suburban districts or adjoining towns and cities.

Tokyo.—The system as existing at the end of December 1926 comprised 25 sections with total mileage of 194.4 and 367 stops. The cars totalled 1,455, i.e. 312 4-wheelers and 1,143 bogie cars. The working staff numbered 8,215 including 4,493 conductors (of which 93 women) and 2,669 motor-men. The fare is uniform 7 sen for single and 14 sen for return ticket. Reduced fare of 10 sen for return ticket is allowed to workmen and students in early morning.

Osaka.—The figures at the end of December, 1926, were:—total working mileage, 54.9, number of cars, 16,631 made up of 6,546 4-wheel, 3,188 ordinary bogie and 741 low-floor bogie cars; staff 4,180 including both motor-men and conductors.

The working results for the two cities for the year ended December 1926 were as follows:—

	No. of cars run (reduced on 4-wheel basis)		Vehicle mileage in 1000 reduced on 4-wheel basis		Passengers carried in 1000		Receipts in Yen 1000	
	Tokyo	Osaka	Tokyo	Osaka	Tokyo	Osaka	Tokyo	Osaka
Total	462,343	294,694	67,798	33,329	461,345	304,598	30,561	17,268
Av. per day	1,267	807	186	91	1,291	835	84	47

8. AUTOMOBILES AS AUXILIARY OR RIVALS

State railways and private railway carriers find themselves confronted with the grave question of railway transport v. automobile conveyance, so menacing has lately grown the latter as rival to the other. In 1926 the motor-bus service operating in the railway zones is believed, as computed on conservative basis,

no reliable data being available, to have realized result as follows:—

No. of passengers carried, 5,286,415; passenger mileage, 44,730,887; average 14,483 passengers and 122,550 mileage. Now compared with the volume of passenger traffic of State and private railways for 1925, counting only travellers booked 25 m. or under and excluding season-ticket users, the foregoing motor-bus returns correspond to 1.7%. This by itself does not seem formidable, though the percentage must have risen much higher since then.

The State Rlys researches, from which these data are quoted, next proceed to take up the subject of how far the automobile service acts as auxiliary organ of transport to State Rlys and how far as rival.

	Total volume of pass. traffic	Volume of affected traffic	Percent.
Passenger	120,254,527	5,286,415	—
Ave. per diem.....	329,464	14,483	4.4%
Passenger mileage	563,167,815	44,730,887	—
Ave. per diem.....	1,542,922	122,550	7.9%

The motor-bus service operating in the railway zone may practically be considered as auxiliary facilities of transport so far as regards the State lines, but this relation between the two services presents a considerable difference when comparison is made on freight service.

	Total rly tonnage	Affected tonnage	Percent
Tonnage	1,477,592	731,201	—
Ave. per diem.....	4,048	2,003	49.5%
Ton mileage	22,130,271	10,077,032	—
Ave. per diem.....	60,631	27,608	45.6%

It will be seen from the foregoing figures that as regards freight service automobiles function almost equally as auxiliary and rival.

Business Results of Automobile Service running parallel to Railways

Though accurate data on this subject are out of question, the inquiries carried out by the State rlys on what is deemed as the most reliable factors of computation show that the automobiles operating parallel are represented by the following figures as to volume of business:—

Working results of automobiles operating parallel to State lines and private lines:—

	Passengers carried	Passenger mileage	Tonnage hailed	Ton mileage
Parallel to State rlys...	5,286,415	44,730,887	731,201	10,077,032
Parallel to private rlys	13,029,586	108,579,881	140,657	1,931,059
Total	18,316,001	153,310,768	871,858	12,008,091

Traffic Receipts of Parallel-operating Automobiles

	Passenger receipts	Freight receipts	Total (Yen)
Parallel to State rlys.....	1,057,283	1,243,042	2,300,325
Parallel to private rlys.....	6,096,434	266,477	6,362,911
Total	7,153,717	1,509,529	8,663,246

The foregoing figures sufficiently indicate how hard pressed are the private lines by the aggressive automobiles running in close juxtaposition. Indeed were it not for the Government guarantee of 7% profit granted to local private lines no small number of them would find it hard to keep their business going. The latest shift made by some 12 of them is the replacement of either the steam or electric engines with more economic gasoline engine. The enormous difference in the most important item of initial cost between the motor vehicle business and the steam or electric-worked service is more than enough to show how handicapped the latter is in its competition with the more elastic lighter car traffic. Thus for laying one mile of railway a sum anything around ¥200,000 is to be consolidated, while for undertaking the automobile service with five or six vehicles ¥30,000 would be enough. Even if a special road for exclusive use of the motor traffic is to be constructed the cost required would be a third of what is for the regular railway service. Till quite recently it has been the policy of the supervising authorities to refuse charter to promoters of railway traffic, steam or electric, when the distance to be operated is under 5 m., but the permission limit will soon be raised, it is understood, to ten times as long.

Increase of Automobiles in Recent Years

The growing popularity of automobiles recently either for private use or for commercial purposes is really striking, as shown in the following tables:—

	No. of cars	Increase	%
1921	12,117	—	—
1922	14,886	3,769	23.0
1923	12,765	- 2,121	- 14.0
1924	27,237	14,472	113.0
1925	32,027	4,790	18.0
1926	40,070	8,043	25.0

For the decrease in 1923 the disastrous earthquake-fire in Tokyo-Yokohama districts in Sept. 1923 is responsible.

The number in 1926 amounts to one car per 1,400 people.

Classified into the two main divisions of riders and lorries the figures are as follows:—

	Riders	Lorries
1921	11,226	889
1922	13,483	1,383
1923	10,776	2,099
1924	18,951	8,282
1925	22,602	9,425
1926	27,959	12,097

The rate of increase during the six years ending 1926 makes this show:—

Riders	Increased	16,731	or	3,346	per year,	i.e.	149%
Lorries	"	11,208	"	2,212	"	"	" 1261%

9. JAPAN TOURIST BUREAU

For the purpose of introducing Japan to foreign countries, the Bureau was established in 1912 as a joint enterprise of the Japanese Government Railways, and other railway and steamship companies, hotels, and firms dealing with foreign tourists. The Bureau affords special facilities gratis to tourists, such as furnishing all necessary information as to travelling, issuing letters of introduction, securing admission to places of interest, arranging itineraries, giving estimates of expenses, supplying information, booklets, etc. For the convenience of tourists utilizing the organization, the Bureau also conducts tourist business in general, booking for railways and steamers to points at home and abroad, selling travellers' checks, etc. The head office is situated in the Tokyo Station Building, Tokyo, and Branches or Inquiring Offices at Dairen, Keijo, Taihoku, Tokyo, Yokohama, Nagoya, Kyoto, Osaka, Kobe, Shimonoseki, Nagasaki, Mukden, Changchun, Harbin, Manchuli, Peking, Tientsin, Shanghai, New York, etc.

CHAPTER XXIV

SHIPPING AND SHIPBUILDING

I. SHIPPING

INTRODUCTORY REMARKS

Genius of Japanese as Seafaring People.—As may be surmised from the insular position of the country, the seafaring propensity of our forefathers was fairly well developed even in ancient days. It had become especially marked from about the close of the 16th century to the beginning of the 17th when Japanese trading vessels visited China and more than twenty other countries in the South Seas and East India for purpose of commerce. What is of special significance, Japan even sent diplomatic envoys to Europe and Mexico at that time.

Had our people been left free to follow their own bent as regards maritime activity who knows but that the course of our history might have taken a different direction from that presented when Perry's squadron reached our shores about the middle of the 19th century? But this was not to be, for as briefly referred to in the Chapter on Outline of History, a stern decree was enforced, from political motives, at the beginning of the 17th century by the de facto rulers of the country forbidding our seamen on pain of death to make distant voyages. The fact that this ban was mercilessly enforced for about two centuries must have warped the natural growth of Japanese shipping activity, since it restricted our sailors to the coasting service which by the way had already so far progressed about the early part of the 17th century as to open regular liner traffic between Osaka and Yedo (Tokyo). This was maintained with creditable success both as regards frequency and speed till the time of the Restoration when the carrying trade, freed from its chains, underwent a complete transformation. The Japanese, it must be admitted, were well qualified from olden times as seafarers in adventurous spirit, the art of navigation and shipbuilding and business organization, and it is not to be wondered at that with the removal in 1862 of the ban on ocean voyages, the carrying trade of the country should have made a marvellous development, as today bears witness.

Japan to Depend on Foreign Supplies.—Japan is scantily gifted by nature, and limited as to resources and territorial area, is obliged to depend upon foreign countries even for supply of the necessaries of life. First as regards rice, the staple food-stuff of Japan, we have to make good the shortage with what can be imported from Burmah, French-India, China, and even California; for textile materials, raw cotton and wool, we have to depend almost exclusively upon foreign supplies, while more recently building materials, especially timber, are bought from

America. Needless to say that for chemical stuffs wanted in various industrial purposes and for machines and machinery Japan is still largely dependent upon foreign countries. All these imports mean for us islanders ship-bottoms, which is of course inseparably associated also with what we ship abroad to balance the international trade account.

No authentic data exist as to the contribution of our carrying trade to the total earnings of the country, the only reliable figures available on this subject being those supplied by Mr. J. Inouye, Minister of Finance in the short-lived "Earthquake Cabinet," who has calculated shipping's share at roughly ¥170 millions for both 1922 and 1923. The figures for the later years, as worked out on his formula, must be less considering the general depression of this trade, but its important position in the economy of the country remains unaltered. As the only safe and valuable field of exploitation outside the territorial limits for promoting national prosperity the trade certainly demands the utmost endeavors of our people.

Features of Japanese Shipping

Growth of Shipping.—The recent growth of Japan's merchant marine was chiefly due to the import of second-hand vessels from Europe. With the outbreak of the European war, however, and the impossibility to import them the home yards were thrown into a feverish state of activity to meet the rush of orders for new vessels and about 1,600,000 tons (net) were added to the tonnage during the period between 1916 and 1921. When it is remembered that in normal time about 6-70,000 tons were the average addition yearly built at home, this expansion was really amazing. After the termination of the war the import of old vessels from abroad revived even when the shipping business was experiencing general inactivity. Due to superabundant bottoms no small number of vessels were tied up from scarcity of cargo. The earthquake disaster of 1923 encouraged a speculative purchase of second-hand boats in anticipation of an active shipping business to be occasioned by conveyance of reconstruction materials. Driven by cupidity even amateurs hastened to sign contracts for purchasing old vessels, with the result that Japan's shipping registers were additionally encumbered on that occasion by over 400,000 tons, all in the shape of worn out vessels.

One thing remarkable about the increase of shipping in this country in the past has been that its ascending curve marks a close parallel to that indicating the increase of tonnage mileage of goods carried by rail. Only in the last few years, the increase of the tonnage figures is not so significant as in the previous years, which may be attributed to the recent inactivity of shipping business. Viewed as a whole, however, the increase of shipping in this country so far is nothing remarkable.

Sailing Vessels.—A noteworthy feature in the shipping statistics of Japan in marked contrast to what is generally observed in other countries is the constant increase of tonnage of sailing vessels side by side with the growth of steamships. This increase of sailing tonnage, however, is really nominal, for smaller sailers of the type of lighters not exceeding 100 tons

constitute about 60 per cent. of the total, the combined tonnage of larger craft amounting to only about 300,000 tons. These sailing ships are engaged in coastwise trade around the country and colonies. Mention should be made here that since 1921 the number of sailing vessels has gradually declined as is the case with other countries.

Shipping Subsidies.—The amount of subsidy granted to shipping by the Government is very small, really insignificant compared with what obtains in foreign countries. The amount has considerably decreased in recent years, while the grant of navigation encouragement bounty was discontinued long ago, followed by the discontinuation of shipbuilding bounty at the time of the war boom. A few steamship companies are receiving remuneration from the Government, as is done in Great Britain, for the conveyance of mail matter to and from foreign countries.

Characteristics of Japanese Seamen.—Though not absolutely immune from labor troubles, Japanese seamen, compared with their foreign comrades, are mild in temperament and diligent and faithful to their duties. When confronted by a strike of dock hands in a foreign port, for instance, the Japanese seamen usually manage to attend to the discharging or loading of cargo and enable the ship to leave port with no great inconvenience. Then when repairing hands are lacking they will improvise necessary work so that their ship can go on its voyage as scheduled. The strong sense of duty and excellent discipline of Japanese seamen are, indeed, hardly paralleled in other countries. It has been said that though Japanese seamen are willing to work at cheap wages their working efficiency is rather poor. This is an undeniable truth, and along with the growing use of internal combustion engines in the recent years the cheap labor of Japanese seamen may lose significance and cease to be one of their assets.

Import Dues on Vessels in Kwantung.—Hitherto the import of second-hand foreign vessels to Kwantung leased territory was exempt from any levy. To check such wanton import an Imperial Ordinance was promulgated in April '25 prohibiting the free import of foreign vessels to the territory in the future, the Ordinance providing that all foreign vessels to be imported to Kwantung hereafter should first be brought to Japan proper and subjected to the import tax before they can be imported to Kwantung. The rule does not, however, apply to those vessels imported by persons engaged in marine transportation of travelers and goods entering or leaving the Kwantung leased territory and possessing their principal business headquarters there. The measure is believed to serve the purpose of checking the abuse as regards import of second-hand foreign vessels to the territory.

Wireless Telegraphy on Vessels.—A Bill providing for compulsory instalment of wireless telegraphy on all vessels of over 2,000 gross tons, also those carrying over 50 passengers, was passed by the Diet in 1925, and was enacted on Nov. 1, 1926.

GROWTH OF VESSELS

Number and Tonnage of Registered Vessels

In the following table vessels registered in the jurisdiction of Kwantung, Korea and Formosa are included.

	Steamships		Sailing Vessels	
	Number	Tonnage	Number	Tonnage
1923	3,049	3,322,764 tons	13,842	904,213 tons
1924	3,143	3,520,748 ..	13,891	891,135 ..
1925	3,187	3,496,262 ..	14,084	883,353 ..
1926	3,547	3,995,195 ..	14,855	899,342 ..
1927	3,561	4,010,381 ..	14,902	899,233 ..
1928 (end of Mar.)	3,617	4,096,567 ..	15,582	910,352 ..

Those registered in Japan proper only at end of May 1928 were 3,318 steamers (3,709,175 tons) and 14,302 sailing vessels (864,646 tons).

Ships Classified

Those steamers of over 1,000 gross tons were returned as follows at the end of 1927. (The figures exclusive of vessels registered in Korea, Formosa and Kwantung District):—

By Age, at end of 1927

Japan proper:	No. S.S.	Gross tons
Under 10 years.....	484	1,832,000
" 25 "	267	1,008,000
Over 26 "	261	834,000
Total	1,012	3,674,000

No. Tonnage

By Speed (200 tons & over, at end of 1927)

14-15 knot	128	667,230
17-18 "	5	26,659
20-21 "	5	40,572
Total including all others.....	3,287	3,670,097

Number Tonnage (gross tons)

By kinds (1,000 tons & over, at end of 1927)

Passenger & Cargo carriers.....	213	873,580
Cargo boats	638	2,275,937
Oil tankers	7	40,097
Rly ferry boats.....	15	42,025
Cable layers	3	7,183
Storage ships	8	12,516
Patrol ship	1	2,342
Dredgers	2	2,458
Floating crab cannery ships.....	16	38,176
Total	903	3,294,314

The number and tonnage of vessels newly registered in Japan proper during 1927 are as follows:—

	Steamers		Sailing vessels	
	No.	Tonnage	No.	Tonnage
Newly built at home.....	93	59,952	430	19,996
Newly built abroad.....	2	403	—	—
Imported	26	68,108	1	451
Others	28	11,346	143	5,685
Total	149	139,809	574	26,031

During the year 108 steamers aggregating 78,080 tons, and 501 sailing vessels aggregating 33,006 tons were struck out from register, these having been wrecked, lost, sold to foreign countries or disposed of otherwise. The net result was an increase of 61,720 tons in steamers and a decrease of 6,975 tons in sailers.

Leading Shipowners

The latest available registered record of Japanese ship-owners owning more than 30,000 tons gross was as follows:—

Leading shipowners (end of June, 1928)

Owners	No. S.S.	Gross Tons
N.Y.K. (Japan Mail S.S. Co.).....	97	622,633
O.S.K. (Osaka Mercantile S.S. Co.)...	104	448,173
K.K.K. (International S.S. Co.).....	59	319,240
Kinkai Yusen Kaisha.....	44	125,517
(Near Sea Mail S.S. Co.)		
Mitsui Bussan Kaisha.....	26	82,166
Dep't of Finance, Railway, etc.....	23	74,113
Kawasaki S.S. Co.....	16	94,751
Y.K.K. (Yamashita S.S. Co.).....	10	41,644
Tatsuma S.S. Co.	15	63,562
Nisshin S.S. Co. (Japan-China S.S. Co.)	19	44,086
Hiromi Shoji Kaisha	9	35,846
Dairen S.S. Co.	22	61,461
Katsuda S.S. Co.....	8	31,495
Nihon Kyodo	6	34,549
Toyo S.S. Co.....	10	58,367

Shipping Sales during 1927

44 Vessels d.w. 264,519 tons

	Price					
	Medium sized steamers			Large steamers		
	New	Moderately old	Old	New	Moderately old	Old
Minimum per ton d.w.....	¥150	—	¥20	¥130	¥40	—
Maximum " " "	180	—	40	170	50	—

ALLOCATION OF JAPANESE SHIPPING

According to the investigation made by the Dept. of Communications, at the end of Jan. 1928, vessels over 1,000 tons engaged in the near sea and ocean voyage numbered 1,029 with 4,214,917 tons, classified as follows according to the service:—

Lines	No. S.S.	Gross tons	Lines	No. S.S.	Gross tons
Coastwise	347	555,403	Formosa	54	172,638
Vladivostok	33	98,552	South China ...	21	72,359
Korea	65	130,583	Oceania	5	55,506
North China ...	89	270,806	Java	15	98,511
Central China ..	71	266,652	Straits S'tments	5	21,214

Lines	No. S. S.	Gross tons	Lines	No. S. S.	Gross tons
India	43	435,900	S. America		
Australia	29	235,838	(Eastern Coast) 7	57,892	
Europe	51	364,114	S. America		
East Africa	4	23,213	(Western Coast) 4	35,892	
N. America			In Foreign		
(Eastern Coast) 56	385,271		Charter	3	7,035
N. America			In dock	27	177,173
(Western Coast) 91	616,601		Tied up	4	18,255
Central America 2	155,224		Gov. transports..	3	18,255
			Total	1,029	4,214,917

Regular Service and Subsidy

In 1909 the Oversea Navigation Subsidy Law was promulgated to replace the Navigation Bounty Law in operation since 1896. According to this Law, which was radically revised in 1917, Japanese navigation companies are given mail subsidy for maintaining regular service to Europe, North and South America, and Australia, under contract with the Government for not more than 5 years. The vessels qualified for the service are steamships of over 3,000 tons with a speed of 12 knots or over, built and registered in Japan, and not more than 15 years old. The subsidy is granted at the rate of not more than 50 sen per 1,000 miles run for a vessel having a speed of 12 knots per hour, and for every additional mile of speed over 12 knots the limit of 50 sen is increased by 10%. The companies receiving the subsidy are under obligation to get the approval of the Minister for their passenger and freight tariff, to carry mail matters or materials without charge, to equip the vessels on service with wireless apparatus, etc..

The overseas services run and class of steamers used under the Law are as follows:—

Lines	No. of steamers	Tonnage limit of steamers	Knots	No. of service per year
North America (N.Y.K.)	3	12,500-13,500	18-20	14
South " East coast (O.S.K.)	5	5,000- 7,500	14-16	10
" " West " (N.Y.K.)	4	6,000- 9,700	13-15	8
Africa, East coast (O.S.K.)	4	over 5,500	14	12
South Seas, Java (N.Y.K.)	4	" 3,500	13	18

Commencing January 1, 1929, a new service to Seattle under Government subsidy is to be opened by the N.Y.K. with 3 11,000-12,000 liners, the service to be run 15 times a year.

Regular Oversea Mail Service

Under special contract with the Government, the Nippon Yusen Kaisha runs regular mail services to or from foreign countries. They are at present as follows:—

Lines	Ports of call	No. of service
Yokohama-London	{ Kobe, Shanghai, Hongkong, Singapore, Colombo, Suez, Port Said, Marseilles	Fortnightly or more

Kobe-Seattle.....	{ Yokohama, Victoria or Vancou- ver	{ Fortnightly or more
Yokohama- Melbourne.....	{ Kobe, Nagasaki, Hongkong, Manila, Durban, Thursday Islands, Townsville, Brisbane, Sidney	{ once every month

Near Sea and Coastwise Services

"Near Sea."—The Near-sea service zone previously covered a space between longitude 130°-170° E. and latitude 21°-63° N. including Kamchatka, the Kuriles, Formosa and Hongkong, but in view of the enormous expansion of the South-Sea trade recently it was extended in July 1919 to 95°-130° E. and 11°-27° S., comprising the Philippines, Straits Settlements, Java, Borneo, Celebes, etc. This latter forms the 2nd section of the Near-sea service as distinguished from the 1st section represented by the former. Steamers of over 1,000 tons gross or sailers over 500 tons are now allowed to run in the new and 2nd Section or in both 1st and 2nd combined, subject to the approval of the competent authorities. The scope of coastwise and calm-water services has also been much extended. Equally noteworthy in this connection is that the regulations controlling near-sea, coastwise and calm-water services in Japan proper have been extended and made applicable to those Japanese vessels engaged in the carrying trade between foreign ports or in the rivers and lakes of Korea, Formosa, Saghalien and foreign countries.

Subsidy to Near Sea and South Sea Services.—The Government grants a subsidy to navigation companies to maintain regular services to the South Sea, China and near sea ports. The contract for the subsidy is renewed every year and covers the carrying of mail matters and other obligations.

The principal subsidized lines and maximum of their subsidy for 1927 as approved by the Diet are as follows:—

Lines	Subsidy for 1927 Yen	Lines	Subsidy for 1927 Yen
South Seas	430,000	Japan Sea	310,000
South China Coast....	200,000	Kagoshima-Nawa	60,000
Korea, West Coast....	90,000	China (Yangtze-kiang)	584,000
Dairen	140,000	Hokkaido	235,000
Shanghai	450,000	Vladivostok and Korea, East Coast	—
North China	117,000	Bonin Islands	1,596
Main Island-Hokkaido	50,000	Kagoshima	44,200
Ogasawara-Tokyo	100,000	Okinawa-Sakijima	27,000
Kyushu-Iki-Tsushima..	50,000		

Coastwise.—Before the conclusion of Treaty revision of 1894 the coasting trade was open to vessels flying foreign flags, but by the revision this privilege was restricted to the conveyance of passengers and cargo between Nagasaki, Kobe, Yokohama, and Hakodate. In 1911 the restriction was extended and foreign vessels were forbidden to carry passengers and cargoes between those ports except on a continuous voyage. It should be remem-

bered that the coasting trade of Japan and Great Britain was dealt with in the revised Anglo-Japanese treaty dated April 3, 1911, which provides that the trade should be regulated according to the laws of the United Kingdom and Japan respectively.

Leading Steamship Companies

Nippon Yusen Kaisha (Japan Mail S. S. Co.).—Formed in 1885 by the amalgamation of the two rival companies, the Mitsubishi and the Kyodo Un-yu, the Nippon Yusen Kaisha was in a position to furnish to the Government 57 steamers with 130,000 tons gross when war broke out between Japan and China in 1894. The company's service during the Russo-Japanese War reached the maximum of 74 ships with 252,000 tons in May '04. In 1896 the company put into execution the scheme of opening a regular service to Europe, and in the following year that to America and Australia. The company is also carrying on services to the neighboring Asiatic ports. It has since opened the New York-via-Panama line and the South American line as its latest expansion. In Sept. 1915 the Yusen Kaisha doubled its capital, i.e. to ¥44,000,000 and in 1918 further increased it to ¥100,000,000. In May 1926 the Co. took over the business of the San Francisco and South American services of the T.K.K. together with 8 steamers totalling 85,916 gross tons, and at the same time increased its paid-up capital by ¥6,250,000. The Co. opened a few years ago a high-speed service between Nagasaki and Shanghai by placing on the line steamers specially built for the purpose.

Osaka Shosen Kaisha (Osaka Mercantile S. S. Co.).—The company was created in 1884 as the result of amalgamation of small shipowners who had steamers plying between ports in the inland sea. The field of operation has subsequently been enlarged and at present the company's steamers regularly visit Formosan, Korean, Chinese, other Asiatic and South Sea ports, also Tacoma, Vladivostok, African, S. American and European ports.

Unlike the Nippon Yusen Kaisha and the Toyo Kisen Kaisha, this company was created by the merger of several small S. S. Cos., operating in home waters, and this origin accounts for the active part the Co's. fleet plays in the coast trade.

Toyo Kisen Kaisha (Oriental S. S. Co.).—The Toyo Kisen Kaisha is the youngest sister of the three, having been established in 1896, and a regular monthly service was opened at the end of 1898 between San Francisco and Shanghai-Hongkong in Dec. '95 a two-monthly service to South America. In May 1926, the American lines were transferred to the N.Y.K. and the company has since been carrying on freight business with 6 cargo boats, at the same time reducing its capital to ¥8,125,000.

Nisshin Kisen Kaisha (Japan-China S. S. Co.).—The company was formed by the amalgamation of the Hunan S. S. Co. and the Daito S. S. (both exclusively carrying on inland service on the Yangtze), and the same service of the Nippon Yusen Kaisha and the Osaka Shosen Kaisha. The company opened in 1920 South China coast service and has lately extended the coasting line as far as Tientsin and Dalren and also to Osaka.

Nan-yo Yusen Kaisha (South Seas Mail S. S. Co.)—To encourage the South Sea exploitation the company (formerly "Nan-yo Yusen Gumf") was organized in October, 1912 and opened service with 4 steamers between Kobe, Sourabaya and Java, calling at Hongkong, Batavia and Samarang. The service is once every three weeks.

The Kinkai Yusen Kaisha (Near Sea Mail S. S. Co.)—Was formed in 1923 with the capital of ¥10,000,000 by detaching from the Yusen's fleet smaller boats run along the coast and between Japan and North China, and the neighboring seas.

Business Returns of the Three Leading Companies

	N. Y. K.		O. S. K.		N. K. K.		
	Half Year ended Sept. 30 1927	H. Y. ended Mar. 31 1928	H. Y. ended Dec. 31 1927	H. Y. ended June 30 1928	H. Y. ended Sept. 30 1927	H. Y. ended Mar. 31 1928	
Paid up capital (¥1,000)	64,250	64,250	62,500	62,500	—	10,125	
Debentures (¥1,000) . . .	15,000	15,000	19,750	29,500	—	—	
Reserve funds (¥1,000)	42,422	42,969	34,500	35,100	—	1,161	
Fleet {	book value	56,284	53,992	84,752	82,888	—	425
	gross tonnage..	600,893	600,893	472,500	470,000	—	48,517
	number	92	92	138	137	—	5,203
	(¥1,000)						
Re- ceipts {	cargo (¥1,000) .	27,939	29,312	25,329	26,636	—	5,304
	passenger (")	7,898	7,057	6,166	6,284	—	529
	subsidy (")	1,667	1,611	1,754	1,691	—	308
	others (")	2,023	2,228	1,562	1,909	—	182
	total (")	39,527	40,208	34,811	36,520	—	6,412
Expenditure (¥1,000) . .	36,479	37,118	32,747	34,473	—	6,412	
Net profit (¥1,000)	3,048	3,090	2,064	2,046	—	1,162	
Div. per annum	8%	8%	6%	6%	—	10%	

Tramp Steamers

The close of the world war found Japanese ship-owners encumbered with superfluous bottoms which they were at a loss how to turn to best account. These circumstances account for the unusual activity shown by Japanese trampers both at home and abroad as shown below:—

Allocation of Tramp Steamers (Tonnage in 1,000)

	1928		1927		1926	
	No.	Ton.	No.	Ton.	No.	Ton.
Europe	21	194	27	251	43	392
S. America, Atlantic.....	—	—	—	—	5	38
" " Pacific	—	—	—	—	5	40
N. America, Atlantic.....	16	150	21	204	55	310
" " Pacific	61	568	57	516	32	197
Australia	10	62	10	85	10	99
India & S. Seas (two coastwise)	41	437	48	339	64	459
Coastwise	401	1,767	376	1,580	347	645
In docks, stranded, etc....	57	334	57	389	403	1,339
Total	607	3,415	596	3,683	953	3,527

Note.—Ships under 1,000 tons are excluded. Figures for 1928 are for end of June.

Of the principal tramp-owners, elsewhere given in the list of leading ship-owners, the two that stand out prominent are the Kokusai Kisen and the Yamashita Kisen.

Kokusai Kisen Kaisha (International S. S. Co.).—Organized in 1919 by shipowners to save individual owners and new cos. from the post-war slump in mercantile marine and shipbuilding industry. Capital ¥100,000,000. The Company is engaged (1) in chartering to foreign shippers, (2) undertaking tramp business in the Atlantic and elsewhere.

Yamashita Kisen Kaisha (Yamashita S. S. Co.).—Founded 1902 by Mr. K. Yamashita who as a coal-merchant purchased that year a steamer for carrying his goods, and around it ultimately grew up the present company, capital now ¥20,000,000 fully paid up. The Company's activity was world-wide at the time of the European War, and even today is known as the largest charterer and as operating on a very extensive scale and running 150 ships of over 700,000 d.w.

FREIGHT AND CHARTER MARKET

The coal freight between Wakamatsu and Yokohama is regarded as the standard rate in Japan's near-sea service. Its movement in recent years is shown below:—

		Jan.	Mar.	May	July	Sept.	Nov.	Aver
1926	High	1.55	1.40	1.70	1.65	1.60	1.35	1.50
	Low	1.45	1.30	1.30	1.30	1.40	1.15	1.30
1927	High	1.00	1.80	2.00	2.10	1.80	1.00	1.61
	Low	0.90	1.55	1.40	1.65	1.40	0.80	1.31
1928	High	1.10	1.25	2.30	—	—	—	—
	Low	0.65	1.05	1.70	—	—	—	—

Freight Rate on General Goods of Open Sea Lines

European Line			
Free Vessels		Subsidized vessels	
1918 (Max.)	800 s.	1918 (Max.)	90.09 s.
1924 (Dec.)	75	1924 (Dec.)	75.00
1927 (")	75	1927 (")	75.00
American Line			
1918 (Max.)	\$43	1918 (Max.)	\$ 6
1924 (Dec.)	—	1924 (Dec.)	10
1927 (")	—	1927 (")	10
Australasian Line			
1918 (Max.)	280 s.	1918 (Max.)	50 s.
1924 (Dec.)	60	1924 (Dec.)	60
1927 (")	60	1927 (")	60
Bombay Line			
1918 (Max.)	¥80	1918 (Max.)	¥65
1924 (Dec.)	18	1924 (Dec.)	18
1927 (")	21	1927 (")	21
Calcutta Line			
1918 (Max.) .. (Kobe)	¥60	1918 (Max.) .. (Kobe)	¥60
1924 (Dec.)	18	1924 (Dec.)	18
1927 (")	20	1927 (")	20

Charter Market

Recent movement of charterage (per ton) is given in the following table:—

		June steamers			Dec. steamers		
		Larger Yen	Medium-sized Yen	Smaller Yen	Larger Yen	Medium-sized Yen	Smaller Yen
1926	Min.	1.65	2.10	2.10	1.50	1.50	1.80
	Max.	2.10	2.70	3.40	1.90	1.70	2.70
1927	Min.	1.75	2.35	2.80	1.20	1.50	1.20
	Max.	2.20	3.80	4.30	1.20	2.00	3.50

II. NAVIGATION

Licenses Issued

	Japanese	Foreigners	Total
1924	53,837	132	53,969
1925	56,813	132	56,945
1926	60,154	132	60,286
1927 (end of Sept.)..	62,974	132	63,106

The Pilotage Law promulgated in 1890 restricts pilotage only to Japanese subjects except foreign pilots licensed under Japanese law and also those foreigners sanctioned within five years from 1898. The figures are as follows:—

	1922	1923	1924	1925	1926	1927 (end Oct.)
Japanese	33	36	35	35	43	43
Foreigners	2	2	1	0	0	0

Lighthouses, Marks, and Signals

The first regular lighthouse was erected in Japan at Kannonzaki, in the Bay of Tokyo, on New Year's Day 1869. The lighthouses at Kannonzaki and other places were built under the supervision of foreign experts. In 1881 Japan could dispense with service of the foreign experts, all the lighthouses and other signals built since then being the work of native experts. The figures at the end of Mar. 1928 are shamefully low to those of other countries, for whom the available data are for 1926.

	Coast line	Light- houses, etc.	Coast mileage per 1 mark
Japan	18,188	543	33.50
China	8,640	318	27.17
Netherlands	920	500	1.84
France	2,360	763	3.09

Only the extremes are quoted from the list reporting 13 marine countries.

Shipwrecks

	Steamers		Sailing ships and junks		Lives lost or injured		
	Destroyed	Damaged	Dest.	Dam.	Death	Injured	Missing
1921	89	1,307	314	477	123	50	148
1922	64	1,247	103	548	65	34	216
1924	33	1,558	80	416	151	16	494
1925	31	1,610	68	381	65	59	313
1926	42	1,674	85	285	189	38	524

Safety Provisions

	Netherlands	France	England	Japan
Coast-line (miles)	1,018	2,848	9,953	18,188
No. of lifeboats.....	7	27	63	17
Coast-line per 1 lifeboat (m.)..	145	105	158	1,070
Coast-line per 1 night-mark (m.)	2	4	5	37
Lost tonnage per 10,000 tons of vessels of 500 tons or over...	79	94	46	154

N.B.—The statistics are for 1927, though 1920 for Netherland.

Japan has only one Diesel lifeboat of 30 h.p., which is even inferior to Watson.

Salvage Work

Prior to the remarkable salvage achievement of reclamation, after the lapse of nine years, of £100,000 sterling from the bottom about 40 fathoms deep in the Mediterranean, as described below, the salvage work of Japan had nothing particular to commend it to public attention. In point of fact, it was as late as 1917 that the first company in this particular line was established in Osaka. At present there are two companies, the Teikoku Salvage Kaisha, capital ¥1,000,000 fully paid up, and the Tokyo Salvage Kaisha, capital ¥1,000,000, fully paid up. The two companies own several ships.

The successful salving of £100,000 specie early in August 1925 was achieved by Captain Yumihachi Kataoka from the N.Y.K. S.S. Yasaka Maru sunk by a German submarine on 21 December 1915 at a spot about 70 miles off Port Said, and at 31° 53' N.L. and 31° 20' E.L., according to the log-book of Captain Yamawaki of the ill-fated steamer. The work occupied the small party of six Japanese divers for 71 days and they had to suspend work for 30 days owing to rough waves. Until the last of the 20 cases was refloated four divers had been incapacitated by divers' disease and other ailments. The sea where the adventurous operation was made sounded 40 fathoms.

The Captain's success was entirely due to the special Ogushi patented apparatus which was patented in Japan and 12 other countries and improved to the present state of efficiency by the Captain after nine years' investigations.

Imperial Marine Observatory, Kobe

The institute was established in April 1919, at the cost of ¥230,000 subscribed by the leading shipping men. Its principal aims are to make scientific investigations in meteorology, oceanography, terrestrial magnetism and nautical astronomy, in the interests of the seamen of all nationalities, and also to repair and certify marine chronometers, mariner's compasses, sextants and other measuring instruments of navigation. Daily weather charts, weekly weather reports, bulletins and other scientific memoirs are being published. This is the 5th of the kind in the world and is provided with a wireless station.

III. SHIPBUILDING INDUSTRY

RECENT DEVELOPMENT

The putting in force in 1896 of the Law for Encouraging Shipbuilding has given an impetus to the development of this industry. It was amended in 1900 and the new law came into force in January 1910, to be effective for ten years. In July 1917 it was suspended and finally lapsed in 1920, and since then no such measure has been adopted. The Hitachi Maru, 6,000 tons, built in 1898 by the Mitsubishi Shipbuilding Yards at Nagasaki for the Nippon Yusen Kaisha was the first large steamer built in Japan. Since then the Mitsubishi and Kawasaki Shipbuilding Yards have undertaken the construction of a number of larger steamers of over 10,000 displacement for the Nippon Yusen Kaisha, Osaka Shosen Kaisha and the Toyo Kisen Kaisha. Battleships, cruisers and other small size vessels built for the Imperial Navy and for China should also be recorded to their credit. This shipbuilding record was broken when the two dockyards were each ordered in 1912 to build a dreadnaught of 27,500 tons. Soon after the outbreak of the War the private shipyards enlarged their capacity for shipbuilding and though seriously handicapped by inadequate supply of materials and skilled labor they attained a marked progress. All those yards are suffering from the after-war reaction and have been obliged either severely to curtail the scope of their work or temporarily or even permanently to shift their activity to other lines of engineering work.

Number of Ships Launched

	1926 June 1		1927		1926		1925		1924	
Steamships	No.	Tonnage	No.	Tonnage	No.	Tonnage	No.	Tonnage	No.	Tonnage
1,000 tons & over	—	—	13	45,196	15	47,539	14	49,360	21	66,200
Under 1,000 tons.	—	—	18	6,462	12	3,764	19	5,726	18	5,240
Total	—	—	31	51,658	26	52,408	33	55,086	39	71,400
Sailing vessels										
1,000 tons and over	—	—	—	—	—	—	—	—	—	—
Under 1,000 tons	—	—	4	815	5	560	6	923	8	1,006
Total	—	—	4	815	5	560	6	923	6	1,006
Grand Total.....	25	44,757	35	52,473	32	51,863	39	56,009	41	72,446

Price of Newly Built Ships

(per ton)

	1926		1925		1924		1923	
	High	Low	High	Low	High	Low	High	Low
Over 6,000 tons....	¥140	90	130	90	120	70	130	80
Over 3,000 tons....	160	120	160	100	130	70	130	80
Under 3,000 tons...	160	120	180	110	140	90	150	100

SHIPYARDS AND DOCKS

The number of shipbuilding yards and docks for the past five years is as follows:—

Year	No. of shipyards	No. of docks	No. of floating docks
1923	316	70	3
1924	301,	71	2
1925	303	77	2
1926	326	76	3
1927	362	77	3

A comparison of the number of shipbuilding yards (with capacity for ships of 1,000 tons gross and over), and the berths, employees and ships (of 1,000 tons and over) built by them before and after the War is given below:—

No. of	1913	1918	1924	1925	1927 (Sept.)
Concerns	5	53	18	18	15
Yards	6	57	24	24	18
Berths	17	157	82	82	71
Employees	26,139	95,179	47,743	45,711	—
Ships built ...	4	189	21	14	—
	(34,478 tons)	(518,786)	(66,200)	(14,390)	—

Principal Shipbuilding Yards (Sept., 1928)

Name	No. of berths	Est'd	Location
Kawasaki S. Yard.....	6	1891	Kobe
Hakodate Dockyard	2	1896	Hakodate
Ishikawajima Shipbuild. Yard...	2	1855	Tokyo
Asano S. Yard.....	8	1916	Kanagawa
Yokohama D. Yard.....	5	1891	Yokohama
Uruga D. Yard	6	1894	Kanagawa
Harima S. Yard	4	1908	Kobe
Osaka Iron Works Sakurajima Yd.	6	1880	Osaka
" " Innoshima Yard	8	1914	Hiroshima
Aizawa S. Yard	3	1911	Osaka
Fujinagata S. Yard	5	1874	"
Ono Iron Works	5	1877	"
Harada S. Yard.....	1	1917	Kobe
Mitsubishi S. Yard, Kobe	4	1905	Kobe
" " " Nagasaki ...	6	1857	Nagasaki
Mitsui Bussan Kaisha.....	3	1917	Okayama
Tochigi S. Yard.....	1	1913	Fukuoka
Matsuo S. Yard.....	2	—	Osaka

Mitsubishi Shipbuilding Yard at Nagasaki.—This is the oldest and foremost shipyard in Japan, and in equipment etc. stands comparison with leading shipbuilding works in the world. The works have a water frontage of about one and a half miles and cover nearly 115 acres. Most of the machines and tools in the works are driven by electricity, and for that purpose the firm has a large power house with turbo-generators and dynamos of 2,000 k.w. in total, and also many electric wharf and shop cranes. The Firm holds the license for building Parson's turbines.

Kawasaki Shipbuild. Yard.—The yards cover about 40 acres of land with a water frontage of about one mile. Formerly the company devoted their attention chiefly to building medium-sized steamers and torpedo crafts, but recently the works can build

ships of any size up to a dreadnaught of 27,000 tons. The works are equipped with a large electric driven floating crane of 100 tons lifting capacity. Their steel foundry at Hyogo is provided with a 20 ton Siemens furnace, turning out very fine steel castings. The Co. has secured Italian patents for submarine architecture and for motors.

Osaka Iron Works.—Started by the late Mr. E. H. Hunter in 1880, it was converted into a joint stock co. in 1914. The works now consist of engine department, shipyard and repairing works kept apart, also a branch on Innoshima in the Inland Sea. The shipyard covers nearly 16 acres, with a water frontage of more than 1,000 feet. At first the attention was directed specially to the construction of dredgers, shallow draught steamers, trawlers, etc. Of late they began to build ordinary passenger and cargo boats up to 10,000 tons, with annual capacity of 200,000 tons. The Isherwood type craft is a specialty of the works which have purchased the patent.

Asano Shipbuild. Yard.—at Tsurumi, near Tokyo, made a hurried appearance in 1917, and possesses a number of cradles for ships of 12,000 ton class. The year's capacity almost equals the total of the Japanese dockyards before the War.

Mitsui Shipbuild. Yards.—Established in 1918 at Uno Bay near Okayama, its scope was enlarged in 1927 and moved to Tama, Okayama prefecture, same year. It possesses 2 large dry docks, No. 1 completed in '27 and No. 2 in the following year.

Uraga Dockyard.—Is equipped to build 5 vessels of 5,000 to 10,000 tons but is chiefly known as constructor of medium sized steamers. The ferry boats which the yard recently built for the Government Railways for use between Hakodate and Aomori, etc. are first of this type in Japan.

Yokohama Dockyard.—At Yokohama, was formerly confined to repair work, but has lately begun to combine shipbuilding.

The ambitious attempt has been started by the Mitsubishi, Kawasaki, Asano, etc. to be self-supporting in plates and other important materials, so that they may no longer experience the annoyance caused by the inadequate supply at home.

OUTSTANDING FEATURES IN 1927

Freight Market.—The freight market in 1927 presents a marked contrast between the earlier and later half, i.e. unusual activity in the former and its reaction in the other. The first was due to the brisk shipment of grains from America to Europe from the fall of the previous year and next of coal from October in consequence of the coal trouble in England. This occasioned so much demand for bottoms that most of the larger cargo boats under Japanese flag were able to participate in the lively business which was the highest level attained since the Armistice. The temporary boom naturally reacted favorably upon the shipping world at home where the scarcity of bottom raised the freight rate to the unusual height as that temporarily ruling soon after the earthquake disaster of 1923. Thanks to this abnormal activity of the trans-Atlantic carrying trade the Japanese trampowners, it was reported at the time, could con-

considerably lighten the burden of their outstanding liabilities. The gradual restoration of the normal carrying trade abroad coupled with the continued internal disturbance in China and especially the banking crisis in April followed by a severe dislocation of the economic market, all these combined to vitiate the shipping business of the country. The result was that most of the ship-owners found their business reduced to the deplorable state with little or no margin of profit. Such sudden swing in the movement of freight market is indeed very rare.

Ship-building.—The ship-builders are of course equally suffering from the business depression. Japan's shipyards expanded at the time of the war boom to a capacity of over one million tons, still remain at the respectable level of 700,000 tons, according to the estimate of reliable authorities. Now the mercantile fleet of Japan totals over 4 million tons gross which to be kept in efficient state requires annual replacement of at least 200,000 tons, and about one-quarter of that total tonnage is over 20 years old and only 7 per cent. is five years. It seems a favorable reaction has arrived at last, for we learn that the leading ship-builders as Nagasaki Shipyards, Yokohama Dockyards, etc. are lately having very busy time with orders for new ships, these totalling 19 with 72,000 tons at the end of June 1928 as against 19 with 42,000 tons for the corresponding previous term. The N.Y.K.'s orders stand conspicuous consisting of five 10,000 to 16,000 ton motor ships for the San Francisco, Seattle and South American west coast service. The O.S.K. also have placed order or is about to do so for five or six freight and passenger boats to be run on the Australian and South American routes.

Motor Ships.—Amidst the general depression of the ship-building industry in Japan one thing that stands out prominent is the growing popularity of motor ships among leading ship-owners. Their partiality for this particular class of vessels comes from the consideration that Japanese ships being mainly run on long-distance routes the internal combustion motor is more economical. It is surmised that when our shipowners have to take up any large shipbuilding programme, as they must, if they have to maintain the present position in the maritime world, third in tonnage after America and Britain, the motor ship will be given preference. Already the new departure is much in evidence. The Nippon Yusen Kaisha, the largest shipowning concern in Japan, the Osaka Shosen Kaisha whose fleet is only next to the Yusen in tonnage, the Mitsubishi Trading Co., the Mitsui Bussan Kaisha, both of which are two of Japan's largest trading organizations, and the Itaya Shosen Kaisha run by the largest financier of Hokkaido, have either placed order with native dockyards for regular liners or cargo motor vessels some of which have already been launched or taken delivery of and placed in service. Of the three motor ships launched for the Mitsubishi and one lately ordered, a special correspondent of **Lloyd's List** writes in a recent number, two are tankers, a highly interesting feature, they being the first oil-engined tankers constructed or owned in Japan. All three are fitted with Sulzer engine built at the Mitsubishi Dockyard. The Mitsui had an 8000-ton cargo ship built in Japan in 1924 and have lately taken delivery of two smaller craft, all engined by Burmeister & Wain.

The Yusen Kaisha are having three 16,000-ton transpacific liners constructed, two at the Mitsubishi Dockyard and one at the Yokohama Dockyard. The two will have four Sulzer engines installed, and the third Burmeister & Wain double-acting plant. The Osaka Shosen is gradually turning over its fleet to motor ships and already six vessels of this class have been placed in service, three of them, 14-knot twin-screw passenger and cargo liners on the South American route, and three others, 13½ knots, to operate between home ports and Tientsin. They are all of Sulzer type.

The K.K. S.S. Co. & Kawasaki Dockyard.—The two establishments being closely related financially have sustained a severe blow from the banking failures of April, the former by the close of the Fifteenth Bank, its largest creditor, and the latter by the crush of the once great Suzuki Shoten of Kobe which was its main pillar. The K.K. S.S. and Dockyard's case is a typical instance of the turn of fortune incidental to the Great War. Plainly stated the S.S. Co. was an outcome of a desperate shift of the Dockyard to create credit by utilizing a large number of stock boats built by it at the time of the inflation mania. Started under such peculiar circumstance as the largest tramp-boat concern in Japan owning a fleet of 500,000 ton D.W., it has had to fight hard against adverse condition that has depressed the shipping business recently. At the end of 1927 its borrowings amounted to as much as ¥74½ millions. The fact that the Government is a part creditor complicates the situation. The development is that the creditors have agreed to allow easy terms to it in meeting its liabilities. Its shipbuilding department, the Dockyard, has been restored to its former position a private company and relieved from the control of the Admiralty. Thanks to the 11 million yen loaned by a bankers' syndicate, the Dockyard has been enabled to resume work on its own account and has obtained order from the Admiralty to construct one 10,000 cruiser. The Dockyard is also undertaking car-building, tin-plate making and such subsidiary lines.

Shipping Union.—In accordance with the resolution passed in June 1920 by the International Labor Congress at Geneva the Japan Shipping Union was created in Nov. 1926 by the joint efforts of Government, ship-owners, and seamen, and with its inauguration in April 1927 the Japan Seamen's Relief Society largely supported by the Government has been discontinued. The Union provides a seamen's employment agency, attends to various measures for promoting their interest as disputes between them and shipowners, and so forth. The expense is borne by Government, shipowners and seamen in suitable proportion. The head office is at Kobe with branches at all important places.

CHAPTER XXV

PATENTS, DESIGNS, TRADE-MARKS AND UTILITY MODELS

INDUSTRIAL PROPERTY

The first legislative measure Japan had for the protection of industrial property was the Brief Monopoly Regulations (*Senbai Ryaku Kisoku*) issued in 1871, but they were abolished before they went into force. The actual protection commenced in June 1884 when the Trade Mark Regulations were promulgated, followed by the Monopoly Patent Regulations in 1885. In 1888, the two were superseded by the Patent, Design and Trade Mark Regulations. In those days Japan was still bound by extraterritorial treaties and as foreigners were beyond the control of the native laws their industrial property could not obtain protection in Japan. With the revision of the treaties in 1894-95 the laws on industrial property were subjected to necessary amendment and for the first time the general system of protection as understood in Europe and America was put into force in the country. Subsequently the laws were amended twice, i.e. in 1909 and in 1921, when the present Patent, Utility Model, Design and Trade Mark Laws and rules appertaining to them came into existence, to take effect from January 11, 1922. Main features common to these four laws are as follows:—

(1) Japan from the first adopted the examination system, that is, when there are applications for patents, or registration of utility models, designs or trade marks, they are first examined by Examiners of the Patent Office, and get registration only when they are found conformable to law. This principle remains unchanged. In the new laws, the system of publication has been adopted, that is to say, when the Examiners are satisfied with applications, they first issue an order that publicity be given them, and if within a period of two months no objections appear against the published applications, then upon the expiration of said period the Examiner gives decision to register, and effects registration on payment of prescribed fees. The only exception to the above is in connection with applications for the registration of designs for which registration is effected by dispensing with the process of publicity.

The system of re-examination has been abolished in the new laws. If the Examiner should decide to reject an application, he has to show to the applicant the reasons, if any, for the rejection in order to give him an opportunity to protest. In case the protest is overruled and the applicant is not satisfied with the ruling, he can request a trial-on-appeal.

A trial can be requested to invalidate a patent or a registration granted contrary to the laws, or to a person not entitled

thereto; but this power of request lapses after expiration of five years from the day of registration in the case of patents and with regard to registrations affecting private interests, and three years in the case of utility models. A trial may also be requested to confirm the limits of claims. From a trial an appeal is open to a trial-on-appeal, and from a trial-on-appeal to the court of cassation, but this latter is in regards to points of law only.

(2) Formerly patents were granted only to first inventors, but in the new Patent Law they, as well as the registration of utility models, designs and trade-marks, are granted to the first applicants; and in case there are two or more applications on the same day on the same subject a patent or registration is granted according to an agreement among the applicants, but is withheld when no such agreement exists. In case a patent or registration has been granted to a person who is not entitled thereto, such patent or registration may be invalidated through a trial upon application, and shall be granted to a person entitled thereto.

(3) As regards an invention, a utility model or a design effected by an employe of a private firm or public establishment, even when the invention, utility model, or design lies within the scope of business of the employer, and is accomplished by the employe in discharge of his duty and assigned to the employer according to stipulations in a contract or business regulations, the employer has to pay a reasonable compensation to the employe. In case such employe obtains a patent or registration thereof, owing to absence of such stipulations, the employer is entitled to work it.

(4) A patent, utility model or design, and right to work a patented invention, or registered utility model, or designs as well as right of pledge having such patent, utility model, or design or right of working it as its object is transferable with or without limitation, but unless such transfer is registered at the Patent Office, it cannot be set up against a third party.

(5) With regard to patented articles, and registered utility models and designs, an indication that the article is patented or registered, must be attached thereto, otherwise no damages can be recovered for infringement. No such requirement is needed for trade marks.

(6) When a patent is granted, letters patent shall be issued, and when a utility model or design is registered, a certificate of registration; but for the registration of a trade mark no certificate shall be issued.

(7) A foreigner who is not domiciled, nor has a residence in Japan, is not entitled to enjoy industrial property, unless he is a subject or citizen of a country with which Japan has a treaty or anything corresponding thereto, pledging mutual protection of industrial properties. Even a national of such a country is not allowed to make an application or a request or take any other steps with regard to industrial property, unless he is domiciled or has a residence or bona fide place of business in Japan, or when he does so through an agent living in Japan.

(8) For persons residing in foreign countries or in remote districts where communication is difficult, the Director of the Patent Office may, by virtue of his official authority or in com-

pliance with request, extend the periods prescribed for procedures to be taken vis-a-vis the Patent Office.

PATENTS

Not Patentable.—The following are not patentable:

1. Articles of food or drink or taste (Genusmittel);
2. Medicines or methods of compounding them;
3. Substances manufactured by chemical processes;
4. Articles which are prejudicial to public order, moral or health.

Not New.—The following are not "new":—

1. Inventions which have been publicly known or publicly used in the Empire prior to application for patents therefor;
2. Inventions which have been described in publications distributed in the Empire prior to application for patents therefor to such an extent that the description can easily be put into practice.

Term.—The term of a duration of a patent is fifteen years, counting from the date of publication, a patent for addition expiring with its original.

This term of fifteen years may be extended for not less than three and not more than ten years, if the invention is a very important one and the inventor has not realized proper profits for his invention through no fault of his own.

Patent Fee.—The fee is ¥10 annually, 1st-3rd year; ¥15, 4th-5th year; ¥25, 6th-9th year; ¥35, 10th-12th year; and ¥50, 13th-15th year. The fee for an extended patent is:—

1. 1st year to 3rd year, inclusive, annually.....¥100.
First three years' fee to be paid at once.
2. From 4th year to 6th year, inclusive, annually ¥150.
3. From 7th year to 10th year, inclusive, annually ¥200.

Use of Other's Patent.—When a patented invention can not be worked without a patented invention or a registered utility model belonging to another person being used, a trial may be requested in case the person refuses to grant a license on reasonable terms without proper reasons. This use of a patented invention cannot be exacted unless three years have elapsed from the establishment of the patent right.

In case a patent remains unworked in the Empire without any good reason consecutively for three years or more, and if such patent is necessary for public interests, the Director of the Patent Office may upon receiving application cancel the patent or order the patentee to grant a license on terms to be decided by him, or cancel it in virtue of his authority.

UTILITY MODELS

Any person who has conceived a new model of practical utility in regard to shape, construction or combination of articles may obtain the registration of a utility model with regard to the

article. Prohibitive clauses concerning registration are practically identical to those for the registration of designs.

The term of the exclusive use of a utility model is ten years from the registration.

The fee is at the rate of ¥7 annually for the first three years, ¥15 annually for the next three years, and ¥25 annually for the last four years.

DESIGNS

Subject Matters.—Any new design consisting of forms, patterns, colorings, or their combinations and applicable to articles of industry may be registered with regard to the articles, excepting those which are the same or similar to the Imperial Chrysanthemum Crest, or those which are prejudicial to public order and so forth.

Secrecy of Designs.—A design may be kept secret pending the application and for a period not exceeding three years from its registration.

Term.—The term allowed for the exclusive use of a design is ten years from the registration, similar design expiring with the original.

Fees.—The fee is at the rate of ¥3 yearly for the first three years, ¥5 yearly from the fourth to the tenth year. Register fee of a similar design is ¥3.

TRADE-MARKS

Object of Trade-marks.—A trade-mark may be registered in order to distinguish the goods which are produced, manufactured, worked up, selected, certified, handled or sold by a person as a business. A trade-mark to be registerable must consist of letters, devices or signs, or their combinations and must be distinctive and conspicuous. A designation of colors may be registered.

The following marks are not registerable:

1. Those containing a device similar to the Imperial Chrysanthemum Crest;
2. Those similar to the national flag, the army or navy ensign, decoration, &c., or a foreign national flag; and
3. To a Red Cross, or designation or characters therefor;
4. Those liable to disturb public order or morals;
5. Those containing a likeness, the name or other designation, or the trade-name of another person, unless consent is obtained therefor from the person concerned.
6. Those similar to a mark commonly used with the same, or similar kind, of goods;
7. Those containing a device similar to a prize medal or the like given by an authorized exposition, except in the case when a person uses such medal which he has obtained, as part of his trade-mark;
8. Those similar to a mark of another person well known in trade and to be used with similar kinds of goods;

9. Those similar to registered trade-mark of another person and to be used for similar kinds of goods; and
10. Those similar to a mark of another person, before the lapse of one year since the loss of validity of such mark, unless the mark remained unused for more than one year previous to the loss of its validity.
11. Those apprehended to cause mistake or confusion of merchandise.

Even in cases where the essential part of a trade-mark is not, when separated, unregistrable for its not being special and distinctive, such trade-mark shall be registered if the owner disclaims any right to that part.

A trade-mark similar to another trade-mark owned by the same person and to be used for the same merchandise, or a mark identical with another mark owned by the same person and to be used for a similar kind of merchandise may be registered by the same person as associated trade marks.

A mark used by a person in business the object of which is not profit, will be considered as a trade-mark and is registrable.

A mark of a juridical person to be used by members of the corporation may be registered as a corporation mark.

When Transferable.—A trade-mark right may be transferred only when it is transferred together with the business; it may also be transferred by division according to the goods on which the mark is used.

Cancelled.—It may be cancelled when, without proper reasons, the owner of a trade-mark right has failed to use his trade mark within the Empire for more than one year from the date of registration, or has discontinued the use thereof for more than three years. Registered trade-marks of foreign countries are exceptions.

Term.—The term of the exclusive use of a registered trade-mark is twenty years. The term for a trade-mark already registered in another State, coextends with the term allowed in that State, but in no case can it exceed twenty years. Registration of trade-marks can be renewed.

Fees.—¥30 for registration of a trade-mark and ¥50 for a renewal thereof, the same fee for an associated trade-mark; and ¥100 for registration of a corporation mark and ¥150 for a renewal thereof.

STATISTICS

The number of applications filed with the Patent Office for patents and for registration of designs and trade-marks and utility models, number of patents granted and of designs, etc. registered during the past four years, are as follows:—

Registration of Patent Right

	Applications			Registered		
	Japanese	Foreigners	Total	Japanese	Foreigners	Total
1924	8,148	1,746	9,894	1,382	546	1,928
1925	10,842	1,838	12,680	3,590	1,498	5,088
1926	10,617	1,878	12,495	2,498	1,022	3,520
1927	10,284	2,323	12,607	3,160	1,211	4,371

Registration of Utility-models

		Applications			Registered		
		Japanese	Foreigners	Total	Japanese	Foreigners	Total
1924	.....	22,514	49	22,563	3,388	5	3,393
1925	.....	27,613	86	27,699	11,664	37	11,701
1926	.....	27,395	72	27,467	7,574	45	7,619
1927	.....	27,575	100	27,675	9,336	51	9,387

Registration of Designs

1924	.....	3,759	21	3,780	1,862	10	1,872
1925	.....	5,200	32	5,232	3,042	7	3,049
1926	.....	7,277	77	7,354	3,947	27	3,774
1927	.....	9,162	19	9,181	4,670	21	4,691

Registration of Trade-marks

1924	.....	18,284	1,481	19,765	4,306	516	4,822
1925	.....	19,716	1,225	20,941	10,426	1,299	11,725
1926	.....	20,700	1,026	21,726	9,925	1,098	11,023
1927	.....	18,469	1,227	19,696	7,275	765	8,040

ENCOURAGEMENT OF INVENTIONS

The Society for the Encouragement of Inventions was organized in 1905, and in 1919 the Government announced they would grant every year a certain amount of encouragement fund. In the same year gold medals specially designed were awarded to 15 inventors of merit. The Society is presided over by Baron Y. Sakatani.

In 1925 the Society received a donation of ¥30,000 from the Imperial Household in aid of the encouragement fund. The following year (1926) the Society awarded to 106 inventors medals of merit and letters of praise, 11 of them receiving monetary gift of ¥300 each out of the Imperial donation.

CHAPTER XXVI

INSURANCE

INTRODUCTORY REMARKS

Placed under control of the Department of Commerce and Industry an insurance company is to be organized either on a joint-stock or on a mutual basis, with capital of at least ¥100,000. An insurance company should not combine any other line of business than that of insurance, nor carry on the business of life insurance conjointly with that of property insurance. The official control is effected by requiring the companies to submit an annual statement of operations, making occasional inspection or issuing commands or even suspending business or revoking the charter.

The Government also conducts the post life insurance service, it being initiated in 1916. It also initiated the same year health insurance for the welfare of laborers.

Life Insurance

The pioneer life insurance concern was a mutual insurance company established in 1880. This was followed in the next year by the Meiji Life Insurance Company, an establishment more developed in its organization than that of its predecessor. For lack of experience and materials, the company adopted the Table of the 17 companies of Great Britain as the basis for calculating premium rates. In 1889 the Nihon Life Insurance Company was established. It was by this company that the first mortality table prepared in Japan was put into use. Subsequently many other insurance companies were added to the list, but owing to insufficiency of business experience on the part of the companies and lack of understanding as to its advantages on the part of the public, the insurance business in Japan was in a state of depression during the period extending from 1893 to 1900. The business stood in need of more effective Government control and support, and this desideratum was supplied by the establishment of the Insurance Bureau in 1900. Its development has especially been noticeable since the middle stage of the World War, when Japan experienced a remarkable increment in her wealth.

Property Insurance

The first insurance concern in Japan in this line is the Tokyo Fire Insurance Company, which was established in 1888, the business of fire insurance having been inaugurated here somewhat later than that of life or marine insurance. Fire insurance practice in England was taken for the model, and the premium rate was tentatively fixed at 20/1000. During the several years subsequent to the establishment of the pioneer company two others

—Meiji and Nippon Fire Insurance—came into existence. Absence of big fires facilitated the vigorous progress of the business in this infancy stage, and the gradual recognition of its advantages by the public tended to multiply the number of fire insurance companies. The business, however, was soon overtaken by a period of depression as in the case of life insurance. To place it on a sound basis, legal measures were adopted with success. As the Tokyo, Meiji, Nippon, Yokohama and Kyodo—the big five—expanded their operations, there broke out among them a rate war with the result that the rates were quoted at between 2/1000 and 3/1000 in Tokyo and at 1/1000 or less in Nagoya and Osaka. The periods of contract were likewise extended, to two or three years. Further pushing on of this mad competition meant self-destruction, and an understanding was arrived at among the parties concerned as to the minimum rate. The league was first organized in 1907, followed in 1910 by another, and again cutting of rates was practised by the insurance companies belonging to the opposing groups. The competition came to an end in 1917 by the amalgamation of the rival leagues under one association styled the Joint Fire Insurance Association of Japan. The business has continued to be prosperous and according to the statistics compiled in 1923 there were 48 companies with net liabilities amounting to ¥4,267 millions in movable property and of ¥5,285 millions in real estate, exclusive of figures for six cos. whose books were destroyed in the earthquake. Increase in the number of companies in the same business resulted in keen competition among them but at last the situation was relieved by an agreement entered into in February, 1923, by the parties interested to make an allowance of 10 per cent. in premium rates. In Nov. 1924 this agreement was replaced by one aimed at restoring the tariff to the former level, at the same time leaving the member cos. to make an allowance of 10% at their own discretion.

As has already been stated, incidentally, the inauguration of the marine insurance business in this country antedated those of life and fire insurance, the date being 1878. The Tokyo Marine & Fire Insurance Company, the oldest of the kind in Japan, monopolized the business for fourteen years, that is, till 1893, when five competing companies appeared in the field. The business now became gradually extensive, especially as many of the property insurance companies extended their operations to this branch of the service. Japan's joining the World War afforded an opportunity for a phenomenal development of the business. For the protection of marine insurance companies, the Government enacted and enforced in 1914 a law providing subsidies for them in time of war. While this law was in operation, that is, from Sept., 1914, to Sept., 1917, 512,000 contracts were entered into, representing ¥4,611 millions in value, and the State subsidies granted amounted to ¥2,790,000. How remarkable is the progress the business had achieved may be gathered from the fact that at the end of 1923 policies numbered 224,905 with 196,000 contracts representing ¥518,432,000 in sums covered, exclusive of the figures for the Tokyo Fire.

A few attempts have been made to establish the business of transport insurance in this country, the first being in 1891. These attempts were made by companies making the business

their specialty, but unfortunately they were not successful. At present it is carried on as side business by some companies engaged in other lines of property insurance. There are 25 such establishments, and at the end of 1923 policies numbered 43,425 with the cover totalling 116,299,000, exclusive of the figures for the Tokyo Fire.

Accidents insurance first attracted the attention of those in the insurance business in Japan in 1893, but it was not till 1911 that this department of the insurance business was started in this country, the pioneer company being the Chuo Kasai Shogai Hoken Kaisha, followed by the Kyodo and the Nippon. So far the service has failed to achieve any particular success.

With the single exception of boiler and engine insurance, other lines of the property insurance business are conducted in conjunction with others by companies dealing in general property insurance, such as fidelity, automobile liability, and burglary.

PRESENT CONDITION—JAPANESE COMPANIES

Life Insurance

There were 40 life insurance companies (2 mutual) in Japan with an aggregate capital of ¥48,740,000. Their contracts ran up to 5,649,363 representing ¥5,596,400,000 in value.

The mortality tables widely adopted by our companies are the Combined Experience Table, the American Experience Table, Farr's Table, the Experience Table of Three Japanese Companies, and Table No. 2 of the Bureau of Statistics of Japan. The Japanese Experience Table is remarkable as the first experience table in Japan. It was compiled under the direction of Mr. Kaitaro Ebihara, an actuary, from the data supplied by 480,000 insured lives contracted for by the Meiji, Teikoku and Nippon Life Insurance Companies. The Statistics Bureau Table is a mortality table prepared under the direction of Mr. Tsuneta Yano, a well-known life insurance authority.

The percentage of actual deaths to estimated deaths at the leading life insurance companies in Japan in 1925, averaging men and women, was:

Minimum, 65.84 persons (insured value, 57.20).

Maximum, 129.55 persons (insured value, 143.34).

Average for all the companies, 92.51 persons (insured value, 87.50.)

Principal Causes of Deaths

Principal causes of deaths of insured as compiled by Dr. T. Takata, Medical Director of Meiji Life Ins. Co. are tabulated below in percent:—

Cause of death	Males %	Cause of death	Females %
Tuberculosis of lungs....	16.1	Cerebral haemorrhage ...	9.6
Cerebral haemorrhage ..	13.2	Pneumonia	5.2
Pneumonia	5.7	Chronic nephritis	6.7
Chronic nephritis	5.6	Gastric and intestinal	
Heart diseases	4.8	catarrh	4.4
Tuberculosis of lungs....	14.3		

Property Insurance

There are 51 insurance companies of this description in Japan at the end of March, 1926. Out of the number 49 are engaged in fire insurance, 35 in marine insurance, 27 in transport insurance, one in fidelity insurance, one in boiler and engine insurance, two in automobile liability insurance, and one in burglary insurance. Only eight dealt exclusively in fire insurance and three in marine insurance. Besides, there are three companies transacting the business of accident insurance in conjunction with other lines of insurance.

Insurance contracts entered into were as follows at the end of March, 1927:—

Fire Insurance	9,888,774	(¥13,928,810)
Marine Insurance	319,257	(803,175)
Transport Insurance	68,613	(161,289)
The figures for other classes were as follows:—		
Accident Insurance	36,328	(122,407)
Fidelity, Automobile, Liability, Burglary, Boiler and Engine insurance combined at the end of March, 1927	73,958	(55,192)

State Industrial (Post Office) Life Insurance

This form of life insurance came into operation in 1916, after remaining an outstanding proposition for 17 years. All business connected with State life insurance is transacted at the post offices throughout the empire, over 8,000 in number. Policies are of two kinds—life and endowment. The age limits are from 12 to 60, and the endowments range from ¥20 to ¥350. Remarkable as has been the development of this business the number of policies stands at 190 per 1,000 population against 1,178 in England and 698 in U.S.A.

Below are given the number of policies (in 1,000) and sum insured (in ¥1,000) for the last few years:—

	1925-26		1926-27		1927-28	
	No. of policies	Sum insured	No. of policies	Sum insured	No. of policies	Sum insured
Life	3,192	407,163	3,604	467,600	—	—
Endowment ..	5,121	646,616	6,447	818,907	—	—
Total	8,313	1,053,779	10,051	1,286,507	11,678	1,488,103

Post Office Life Annuities

Inaugurated in Oct. 1926 the service consists of two systems, i.e. Deferred and Immediate Life Annuity. The age limit of applicants ranges between 12 and 60 for the former and between 40 and 80 for the latter. The Deferred annuities are subdivided into four different forms, to commence at the age of 50, 55, 60 or 65. The maximum amount of annuity is ¥2,400 and the minimum ¥120. The premiums are payable at any post office specified by the applicant and either in a single sum or by instalments payable yearly, half-yearly or quarterly. The premiums payable differ according as the purchase-money is returned or not.

Deferred Life Annuity Premiums Payable in a Single Sum
(Cost of ¥100 Annuity)

Purchasing money not returned.

Age	Commencing at 50		Commencing at 60	
	Males Yen	Females Yen	Males Yen	Females Yen
12	96.10	105.74	35.39	42.78
20	158.46	175.09	58.35	70.83
30	303.38	336.11	111.72	135.97
40	582.65	648.52	214.57	262.35

Purchasing money returned.

Age	Commencing at 50		Commencing at 60	
	Males Yen	Females Yen	Males Yen	Females Yen
12	105.46	116.38	39.33	47.49
20	176.60	194.88	66.37	79.94
30	337.24	371.17	128.81	153.96
40	648.44	705.16	254.34	297.67

Immediate Life Annuity Premiums Payable in a Single Sum
(Cost of ¥100 Annuity)

Age	Purchase money not returned		Purchase money returned	
	Males	Females	Males	Females
40	1,340.12	1,410.97	1,419.16	1,481.06
50	1,160.19	1,261.57	1,272.52	1,347.51
60	930.94	1,040.79	1,091.92	1,169.75

Statistics

No. of contracts	Amount of annuities	Average amount per contract
1926-27	71	¥7,159
1927-28	177	14,526
		¥100.8
		81.8

N.B.—For the first year the figures represent the result for the six months from October 1, '26, when the system was inaugurated, till Mar. 31, '27.

GENERAL STATISTICS ON INSURANCE FOR 1927-28

The position of insurance business in Japan as divided into two main groups, life and property, is shown below:—

Life Insurance

Subscribed capital	¥ 48,740,000
Paid-up capital	22,792,895
Amount of contracts at year-end.....	6,037,444,961
Insurance receipts	256,833,614
Amount of reserves at year-end.....	992,345,113

Property Insurance

Subscribed capital	292,500,000
Paid-up capital	105,065,000
Amount of contracts at year-end.....	16,172,808,948
Insurance receipts	115,006,003
Amount of reserves at year-end.....	170,755,023

Investment of Insurance Cos. at end 1927-28

Principal items of investment of life and property insurance cos. are tabulated below in ¥1,000:—

	Life cos. (41)	Fire & marine (52)
Cash	432	302
Postal transfer	1,148	399
Bank deposits	174,075	86,152
Loans	209,551	51,893
Negotiable bonds	477,942	156,426
Cash in trust	10,200	2,580

Life Insurance

Ending March	No. of Co.	Cap. p.u. Yen 1,000	Reserves Yen 1,000	Premiums Yen 1,000	Claims Yen 1,000	No. of Policies	Insurance Yen 1,000	Expense Yen 1,000
1926 ..	42	22,792	816,995	221,044	59,334	4,814,423	5,197	62,375
1927 ..	40	19,572	909,345	233,605	68,687	4,834,690	5,522	62,179

Leading Life Insurance Cos.

(ending Dec. 1927)

Name of Co.	Reserves at end of year	Policies	Insurance Yen 1,000	Premium	Claims paid	Working expenses
Meiji	80,084,526	344,085	544,529	22,267,497	6,157,760	4,560,190
Teikoku	70,501,717	364,762	390,064	15,684,424	5,496,002	3,464,292
Nippon	131,484,427	599,645	631,374	24,716,556	8,689,936	5,120,398
Yurin	26,320,854	167,252	125,971	5,818,620	1,878,025	1,724,461
Kyosai	43,598,419	214,293	265,454	10,869,838	4,026,387	3,313,863
Jinju	38,621,844	222,428	222,268	10,448,668	3,205,174	2,400,257
Kyoho	27,276,701	184,729	164,098	7,153,642	2,276,986	2,020,473
Daido	39,065,467	215,875	227,847	8,809,513	3,131,650	2,290,896
Dai-ichi	48,519,715	194,716	452,072	16,541,524	3,533,062	2,764,899
Chiyoda	61,851,228	263,933	534,007	19,783,861	5,551,281	3,778,798

Fire Insurance

Ending March	No. of Cos.	Cap. p.u. Y. 1,000	Reserves Y. 1,000	Prem-iums Y. 1,000	Claims pd. Y. 1,000	Expenses Y. 1,000	Policies	Insurance Y. 1,000
1926 ..	51	100,440	70,419	73,074	29,962	43,834	10,134,559	13,351,156
1927 ..	50	105,065	77,520	76,633	28,735	47,383	9,833,774	13,928,810

Leading Fire Insurance Cos.

	Reserves at end of year	Premiums	Claims paid	Working expenses	Policies	Amount Yen 1,000
Tokyo M. & F. 1927	13,500,000	6,910,557	2,674,046	3,359,200	1,029,564	1,493,185
Tokyo F. "	3,500,000	4,447,871	1,783,891	2,623,593	1,003,648	1,039,923
Meiji "	12,000,000	3,101,543	1,153,971	1,515,720	557,075	889,957
Nippon "	9,050,000	5,163,847	2,365,755	3,174,045	690,036	1,022,066
Teikoku, M. "	1,319,000	2,064,560	745,767	1,269,540	311,570	462,542
Kyodo "	2,600,000	4,579,409	1,451,917	2,359,063	755,494	1,126,529
Hokoku "	2,030,000	1,586,080	576,616	1,287,689	131,668	307,631
Teikoku F. "	1,630,000	3,132,056	1,136,610	2,032,708	247,062	531,165
Chiyoda "	1,455,000	1,998,436	798,254	1,473,803	216,035	406,380
Yokohama "	3,300,000	3,640,931	2,070,765	2,156,702	480,804	988,570

Marine Insurance

Name of Companies	Year ending March	Premiums	Claims paid.	Working expenses	Liability reserves at end of year
Tokyo Marine.....	1927	7,588,738	4,481,365	1,757,816	34,300,000
Tokyo F & M.....	„	205,885	242,628	64,854	200,000
Nippon	„	301,484	349,593	17,944	600,000
Teikoku	„	2,198,282	1,668,589	562,761	620,000
Yokohama	„	1,160,222	993,671	266,240	500,000
Kyodo	„	583,850	518,037	180,138	278,000
Hokoku	„	181,953	150,193	33,559	600,000
Chiyoda	„	159,013	171,317	25,049	13,600

Conscription Insurance

Year ending March	No. of Cos.	Reserves Yen 1,000	Premium Yen 1,000	Claims pd. Yen 1,000	No. of Policies	Insurance Yen 1,000
1926-27	4	67,357	17,570	490	834,940	398,933
1927-28	—	80,560	18,962	593	882	446,742

Interesting to state this semi-insurance business has made a highly creditable development in Japan, where exist four insurance cos. in this line, three joint stock and one mutual. They are on the whole doing well, the ¥50 share of the oldest concern, First Conscription Co., for instance, being now quoted as high as ¥700. The business of conscription insurance is worked on a principle entirely distinct from that of ordinary insurance, the element of chance entering only very slightly in it. The main idea is to provide something for the parents while their sons are away in the barracks, so that when the assured is enrolled on reaching the conscription age of 20, the sum contracted for is paid. The contract may be entered any time between the day of birth till the boy reaches the age of 15. For the insurance amount of ¥1,000 the premium when paid in one lump sum is ¥231.20 for a baby under one. When he is not enrolled only the premium paid in will be repaid, and such exempted lad has to waive the interest on the premium paid in. On the other hand, the assured who is enrolled is entitled to participate in the waived interest of all the others not enrolled or who die before enrolment. The conscription insurance may, therefore, be considered rather as endowment or providence contract.

Reinsurance Business

In the first year issue published in 1928 of the Hoken Nenkan (Insurance Yearbook) Dr. Miura, the author and life insurance actuary, writes that reinsurance returns in Japan lack accuracy as no distinction is made between reinsurances placed at home and those abroad while the amount retroceded is included in that of reinsurance. With this reservation the figures under the head "Reinsurance" in the Government Insurance Yearbook being the only available data on the subject are quoted as follows:—



The Mitsui Bank, LIMITED

Capital Subscribed	- - -	Yen 100,000,000
Capital Paid-Up	- - - -	„ 60,000,000
Reserve Funds	- - - -	„ 63,500,000

HEAD OFFICE:

No. 5, Honkawaya-cho, Nihonbashi-ku, Tokyo

HOME BRANCHES:

Fukuoka, Hiroshima, Kobe, Kyoto, Marunouchi (Tokyo), Moji,
Nagasaki, Nagoya, Nihonbashi (Tokyo), Osaka, Osaka-Dojima,
Osaka-Kawaguchi, Osaka-Nishi, Otaru, Shimonoseki,
Wakamatsu (Kyushu), Yokohama

FOREIGN BRANCHES:

Bombay, London, New York, Shanghai, Sourabaya

LONDON BANKERS:

Barclays Bank, Ltd. Midland Bank, Ltd.

NEW YORK BANKERS:

Bankers Trust Co. Chase National Bank
National City Bank of New York

Takuma Dan,
Chairman of Board

Umekichi Yoneyama,
President

THE
mitsui TRUST COMPANY
LIMITED

The First Trust Company
Established under the New Trust Law of Japan

Capital - - - Yen 30,000,000
Trust Properties - - - Over Yen 310,000,000

DEPARTMENTS:

TRUST, BOND, LOAN, SAFE DEPOSIT,
REAL ESTATE, LEGAL, FOREIGN

OFFICES:

Head Office: Hibiya Park, East, Tokyo
Osaka Office: Koraibashi, Osaka

Correspondence Cordially Invited

	No. of contracts	Amount (Yen 1,000)
1924	2,410,166	35,290,625
1925	2,954,318	35,528,640
1926	2,712,751	30,305,945

Figures for the principal reinsurances, i.e. fire and marine, are returned as follows:—

	No. of contracts (fire)	(Amount Yen 1000)
1924	2,325,192	9,590,084
1925	2,852,804	11,154,779
1926	2,609,692	11,272,717

	No. of contracts (marine)	Amount (Yen 1000)
1924	71,849	972,849
1925	88,695	1,125,296
1926	88,103	1,116,303

Historic Fires in Japan

During the period of roughly fifty years extending from 1876 to 1925 Japan had 401 big fires each destroying 1,000 houses or over. The quinquennial averages and the yearly average for the whole fifty years, as also 11 largest each with over 5,000 houses destroyed are shown below:—

Quinquennial Statistics of Fires burning 1,000 or over Houses

1876-'80	7,256	1901-'05	1,059
1881-'85	3,567	1906-'10	6,716
1886-'90	3,522	1911-'15	5,245
1891-'95	2,809	1916-'20	2,171
1896-1900	5,745	1921-'25	1,657
Average			3,975

Conflagrations of 5,000 or over Houses

1876 Nov. 27	Nihombashi, Tokyo	8,550
1878 Mar. 17	Kanda, Tokyo	5,125
1878 Dec. 26	Nihombashi, Tokyo	10,615
1880 Aug. 7	Niigata City	5,500
1881 Jan. 26	Kanda, Tokyo	10,637
1885 June 1	Toyama City	5,900
1899 Aug. 12	Toyama City	5,000
1907 Aug. 25	Hakodate City	9,000
1909 July 31	Kita-ku, Osaka	11,365
1910 May 3	Aomori City	7,519
1911 Apr. 9	Asakusa, Tokyo	6,362

The two tables exclude earthquake-fire disasters which are still practically uncovered in Japan.

It should be noted that the word "house" as used here is highly misleading according to the standard in Europe and America, it being in many cases miserable wooden structures not much different from a mere shed.

The marked decrease of fire damage in the latest decade, 1916-1925, is generally accounted for by erection of more fire-proof buildings, construction of fire-zones in several larger cities, greater efficiency of fire-brigades, and so forth.

The Fire Ins. Cos. and Earthquake-fire Gratuity Payment

It will be remembered that the Japanese fire insurance cos., with sole exception of the Tokyo Marine & Fire Ins. Co., procured on the occasion of the Earthquake-Fire disaster of 1923 to pay gratuity to the insured affected State loan amounting to over ¥63 mil. at 4% for a term ranging between 5 years and 50 at the longest, the repayment to begin in 1927-28.

The continued severe business depression since that time has obliged as many as 17 cos. to distribute no dividend as the payment to the State had to be done in preference over dividend. The payment already made together with the instalment for the following year total a little over ¥8 millions. There still remain some ¥130 millions to be repaid. Agitation has been started by the hard pressed debtor cos. since 1927 to have this special burden relieved or at least lightened; the agitators thinking they have good reason to make this claim considering the extraordinary rescue extended later to those banks involved in the Banking crisis. It is believed that the Government may be persuaded at least to decrease the rate of interest to one half.

Foreign Insurance Companies

Foreign insurance companies doing business in Japan numbered 34 at the end of 1926, i.e. 31 for property insurance and 3 life insurance.

The position of the foreign cos. business is shown in the following figures:—

	No. of policies	Amount (in Yen 1,000)
Life	34,256	154,556
Fire	439,264	1,380,732
Marine	8,684	44,882
Motor car	330	1,355

Commencement of business is allowed only after a deposit with the authorities concerned of ¥150,000 for life insurance and ¥100,000 for property insurance is made. These deposits are subject to increase under specified circumstances and stood at ¥28,189,000 in 1926.

Principal depositors of ¥300,000 and upwards are:—

Sun Life Ass. Co.,	Manufacturers Life
Canada ¥9,877,887	Ins. ¥3,925,000
New York Life Ins... 7,737,800	Sun Ins. Office, (f.m.)
Com. Union Ass. (f.m.)	London 516,604
London 420,882	Phoenix Ass. Co.
Norwich Union Fire	(f.m.) 418,832
Ins. Co. (f.m.)..... 334,002	Yorkshire Ins. Co.
South British Ins. Co.	(f.m. aut.) 327,297
(f.m.) 302,653	

CHAPTER XXVII

BANKS AND BANKING BUSINESS

INTRODUCTORY REMARKS

The establishment of banks, in the modern sense of the term in Japan dates back to 1873 when the Dai-ichi Kokuritsu Ginko (1st National Bank) was founded in Tokyo after the system of the American national banks. By the end of 1879 there were in existence throughout the country 153 national banks, which were all authorized to issue bank-notes. In 1880, the Yokohama Specie Bank was established at Yokohama as a special money organ to conduct foreign exchange business and afford banking facilities to trading circles. Later, in 1882, the Government established the Nippon Ginko (Bank of Japan) in Tokyo as a central semi-official bank with a view to gradually withdrawing the privileges of issuing bank-notes previously given to the national banks and giving the new central bank a monopoly of that privilege. Between 1896 and 1899, the 153 national banks scattered in various important cities were gradually abolished and reorganized as ordinary banks, and meanwhile numerous ordinary banks were newly opened throughout the country. Though commercial in form and denomination, most of these banks and especially those in the provinces were practically agricultural organs in view of the predominance of the farming population in Japan, as is still the case though to a less extent. These banks generally made it their business to advance money to the agricultural community on mortgages consisting of immovable property. The savings bank business was inaugurated by the 1st and 10th national banks in 1878, but the pioneer bank in this line is the Tokyo Savings Bank established in Tokyo in 1880. To afford further monetary facilities to agricultural and industrial interests the Government established in 1897 the Nippon Kangyo Ginko (Japan Hypothec Bank) in Tokyo, this being followed by the establishment in 1898 of the Noko Ginko (Agricultural and Industrial Banks) in each prefecture and in 1900 of the Hokkaido Colonization Bank in Hokkaido, and in 1902 the Nippon Kogyo Ginko (Japan Industrial Bank) as a movable property bank. As central money organs for the colonies, the Government established in 1899 the Bank of Taiwan in Formosa and in 1909 the Bank of Chosen in Korea. Below is given a table showing number of the banking organs for the last few years, excluding the special banks other than the Noko Ginko, whose number has remained fixed recently:—

Name	1917	1925	1926	1927
Noko Ginko (Agricultural & Industrial Banks)	46	27	27	25
Savings Banks	644*	133	124	117
Ordinary Banks	1,398	1,537	1,420	1,364
Total	2,108	1,697	1,578	1,514

N.B.—This table does not include the number of banks in Korea;
 * indicates the number of ordinary banks carrying on savings bank business in addition.

Banking Crisis in the Spring of 1927

Japanese banks have recently passed through three serious phases of crisis, the first being the great international post-war crisis of 1920-21, the second was that of 1923 caused by the disastrous earthquake that devastated the limited zone of Tokyo-Yokohama district. The third and last in the spring of 1927 may be considered as a dénouement led up by the temporizing remedial measures adopted on the two earlier occasions. The economic debacle that burst out swept away large number of propped-up establishments, industrial and financial, and Japan, after having finished the emergency measures demanded by the catastrophe, is now devoting herself to the grave task of reorganizing her economic basis.

The spark that caused the general conflagration in the spring of 1927 originated from the discussion in the Diet over the emergency measures of "Earthquake bills" when some ugly revelations naturally trickled out as to the difficulty in which certain banks had been placed owing to the bills. The general public, already reduced to the state of intense tension since the September disaster, became alarmed at the ominous hints thrown out in the course of the debates, and at a slight incident a run started, and from March 15 to April 21 some 30 banks with the total deposits amounting to ¥900 millions had to shut up their shutters throughout the country. At last the Government decreed moratorium for three weeks beginning with April 22. It was really an extraordinary economic upheaval seldom known in the banking history not only of Japan but abroad, as explained in a special chapter in the Supplement (1928 edition). The terrible hurricane laid low no small number of unsound concerns. The insolvency of the semi-official Bank of Taiwan was followed by the failure of the Suzuki Co. of Kobe whose enormous indebtedness amounting to some ¥800 millions had proved a fatal cancer to the bank. The fate of these two establishments was closely paralleled by that of the 15th Bank, which had been functioning for the Imperial family and landed nobility, and the Kawasaki Dockyard of Kobe, its largest debtor. The two also failed, though the latter has been partially reopened through the help of the Navy.

The defaulting banks totalled 37 by May 15, and with the sole exception of the Bank of Taiwan which has been reopened, the Bank of Japan having extended special credit of ¥200 millions, all the rest remained closed at the middle of November.

Loans made by Bank of Japan

The amount of loans advanced by the Bank of Japan to the banks in distress, which were involved in the banking crisis in the spring of 1927, under the special accommodation acts of May same year, approximated ¥879 millions, the figure being composed of ¥687,000,000 for 88 banks in Japan proper and ¥191,500,000 for 3 banks in Taiwan. The special accommodation, open for one year, was discontinued on May 8, 1928.

"The Earthquake Notes"

The adjustment of the "Earthquake notes" was closed at the end of September 1927 and the notes discounted by the Bank of Japan under the Government Guarantee Regulation totalled ¥185 millions as against the estimated figure of ¥207 millions at the end of 1926, as explained in our 1927 edition. Of that total the apparent loss of the Bank is estimated to come to ¥110 millions, of which the Bank of Taiwan is responsible for ¥46 millions, the Bank of Chosen for ¥15 millions, Mural Bank over ¥14 millions, Tokyo Watanabe Bank ¥6½ millions and so on. It is believed that the net loss of the Bank from the emergency transaction will be somewhere about ¥5 millions, taking into account the discountage set apart, but this is thought only apparent, and that in practice the Bank is judged to have realized no less than ¥33 millions from the huge loans made on that critical occasion.

Amalgamation of Banks

After the European war the Government took measures to encourage the amalgamation and affiliation of minor banks with a view to solidifying their financial stability. As result of these efforts there have been many amalgamations or affiliations during the past several years, the number of amalgamations reaching the highest figure in the first half of 1923. The tendency waned for a while after the great earthquake disaster of September '23, but it revived in 1925 when 69 banks were newly established through amalgamation while 95 banks were dissolved or discontinued for the same reason. There was also disappearance of about 180 minor banks in 1926 and 1927. Though there existed as many as 1,514 banks at the end of 1927 throughout the country, the result of these frequent reorganization has placed the control of the money market practically in the hand of about twenty leading banks mostly in large cities.

The New Banking Law

Features of the revised regulations are:

- (1) A bank must be a joint stock company with a minimum capital of a million yen, but two million yen in case it is located in Tokyo or Osaka (in smaller towns, where the population is under 10,000, the capital may be 500,000 yen for the time being);
- (2) no bank is allowed to undertake any enterprises irrelevant to banking business, except in special cases;
- (3) banks' auditors have to report the result of their audit twice a year to the Government;
- (4) the law simplifies the process of bank mergers;
- (5) competent Government officials are authorized to participate in liquidation or audit; etc. A special section has been established in the Finance Department, its officials being entitled to examine with the bank auditors the books of the banks.

BANK NOTES

Three kinds of currency are in circulation in Japanese territory, viz., Bank of Japan notes, Bank of Chosen notes and

Bank of Taiwan notes. The first is of course the most important, for the Bank of Japan is legally entitled to issue convertible notes to any amount corresponding in value to its specie reserve, or to the extent of ¥120 millions on the security of Government bonds, Treasury or other bills, or commercial bills of a reliable nature. When necessitated by the state of the money market, it may issue notes in excess of the prescribed maximum on a similar security.

The Bank of Chosen is privileged by law to issue bank-notes to any extent against gold coins, gold or silver bullion, or Bank of Japan notes, or to a limited extent on the security of Government bonds, bills, and other bills or commercial notes of reliable nature. When deemed necessary it is allowed to make excess issue within limit of ¥50 millions against security and also to issue ¥20 millions beyond the legal limit. The notes are circulated without restrictions within the jurisdiction of the Governor-General of Chosen, and as the sphere of their currency has been extended to Kwantung province and the South Manchuria Railway zone in Manchuria, in consequence of the taking over of the Yokohama Specie Bank gold notes circulating in these regions, to be gradually replaced by the Bank of Chosen notes, the amount of issue of the notes has considerably expanded.

The Bank of Taiwan notes are legal tender within the jurisdiction of the Governor-General of Taiwan and are issued to any extent against specie reserve and also to the maximum amount of 20 million yen on the security of Government bonds, Bank of Japan notes, etc. An excess issue of notes on the security of a similar nature is made possible through permission obtained from the Minister of State concerned.

Besides these banks, the Yokohama Specie Bank is allowed to issue notes in China against silver reserve. These notes are unrestricted in their use in public and private transactions within the limits of that country, but they are not in circulation in Japan proper.

The volume of circulation is shown later.

PRINCIPAL BANKS

Of principal banks in Japan, the Nippon Ginko (Bank of Japan), the Yokohama Shokin Ginko (Specie Bank), and the Nippon Kangyo Ginko (Japan Hypothec Bank) may be mentioned as the most trustworthy banks among semi-official establishments of the line, while among ordinary banks the first-rate banks are the Mitsui, Mitsubishi, Dai-ichi and Sumitomo, followed by the Yasuda Bank, Kawasaki Daihyaku Bank, etc.

SPECIAL BANKS

The special banks number 32, namely, the Bank of Japan, Yokohama Specie Bank, Nippon Kangyo Ginko, Noko Ginko (25 in all), the Hokkaido Colonization Bank, the Kogyo Ginko (Japan Industrial Bank), and the two colonial central banks of Taiwan and Chosen.

The Bank of Japan.—Founded in 1882, Nominal capital ¥60,000,000 (paid up, ¥37,500,000). The bank issues convertible notes within the limit of ¥120,000,000 on the security of the Government bonds or commercial bills of reliable nature. No limit on the reserve of gold or silver coins or bullion. It pays a tax of 1.25% for average monthly issue of notes and of above 6 percent per annum for any excess issue.

Head Office.—Honryogae-cho, Nihombashi-ku, Tokyo.

The Yokohama Specie Bank.—Founded in 1880 the bank furnishes financial facilities to the foreign trade of the country. Capital increased to ¥100,000,000 paid up in April 1919. The bank buys and receives for collection foreign bills of exchange, issues drafts, telegraphic transfers and letters of credits on almost all parts of the world and transacts general banking business.

Head Office.—Minami Nakadori, Yokohama.

The Hypothec Bank of Japan (Nippon Kangyo Ginko).—Founded in 1895 under a special law, the Bank is a central banking organ for agricultural and industrial enterprise, and is authorized to issue bonds called "Kangyo Saiken" (Hypothec Debentures) up to the amount not exceeding 15 times its paid-up capital, and also, authorized in 1925, to issue bonds called "Fukko Chochiku Saiken" or Rehabilitation Debentures to the total amount of 200 million yen for financing the rehabilitation of the devastated area in the earthquake disaster of 1923 and the promotion of local industrial development.

The Bank has incorporated 21 of the 46 Noko Ginko which were established under special charter in 1896 to finance agricultural and industrial enterprises in the provinces.

Head Office.—Uchiyamashita-cho, Kojimachi-ku, Tokyo.

Agricultural and Industrial Banks ("Noko Ginko" or Provincial Hypothec Banks).—These Banks are also authorized to issue debentures and the 25 remaining banks have succeeded in raising ¥371,975,000, an average of ¥13,776,850, the interest ranging from 8.2 to 7½.

The Industrial Bank of Japan (Nippon Kogyo Ginko).—Established in 1902; Capital ¥50,000,000 fully paid up.

The Bank enjoys the privileges of issuing debentures to an amount of ten times its paid-up capital and to any amount for the purpose of public utility abroad.

Head Office.—Eiraku-cho, Kojimachi-ku, Tokyo.

The Hokkaido Colonization Bank (Hokkaido Takushoku Ginko).—The Bank was established in 1900, under special charter, for the purpose of furnishing funds for colonial enterprises in Hokkaido and Karafuto. Capital subscribed, ¥20,000,000 (¥12,500,000 paid up); reserve, ¥8,177,900. The Bank is authorized by law to issue mortgage debentures up to the amount of ten times the paid-up capital.

Head Office.—Sapporo, Hokkaido.

The Bank of Taiwan (Taiwan Ginko).—Established under special charter in 1899; Capital subscribed ¥15,000,000 (fully paid up); it acts as the central bank in Formosa with a privilege of issuing against the reserve of gold and silver coins or bullion bank notes convertible into gold Yen notes within the limit of ¥20,000,000 covered by Government bonds, commercial bills, etc.

Besides general banking business, it also conducts transactions in foreign exchange matters through its branches as well as correspondents in all parts of the world.

Head Office.—Taihoku (Taipei), Formosa.

The Bank of Chosen (Formerly Bank of Korea).—The law providing for the Bank of Chosen as promulgated in 1911 (revised in 1918) provides that: (1) The Bank be authorized to issue convertible notes and carry on general banking business and also trust business as the central financial organ of Korea, (2) Japanese subjects exclusively shall be allowed to hold shares in the Bank of Chosen, (3) the Government shall guarantee a dividend at the rate of 6 per cent. per annum on shares held by others than the Government for the first 5 years. Capital sub. ¥40,000,000 (¥25 mil. p.u.); Reserves ¥1,001,026; Deposits ¥197,712,705.

Head Office.—Seoul, Chosen.

SYNDICATE BANKS

For promoting their common interest 13 leading ordinary banks in Tokyo, Osaka and Nagoya, three withdrawn through suspension of payment or fusion since the panic, form themselves into syndicate banks. Their financial position has been strengthened since the trouble of Mar. '27, at the expense of weaker establishments. The returns for the first half of 1927 put their total deposits at ¥4,224 millions against loans reaching ¥3,345 millions, the latter being 79.1% to the other. It is significant to note that it was 82.5% and 81.6% respectively for the corresponding term of 1925 and 1926. The rate of increase of deposits and loans in the 1st term of 1927 compares thus as against the two either terms:—

	Against '26	Against '25
Increase of Deposits.....	9.9%	11.8%
Increase of Loans.....	6.7%	7.3%

The position of the leading syndicate banks in Tokyo is briefly described below:

The Mitsui Bank.—Nominal capital, ¥100,000,000 (¥60,000,000 paid up); Reserve, ¥58,400,000; Deposits, ¥560,334,941; Loans ¥431,001,924; Discounts, ¥49,343,255; Foreign bills of exchange purchased, ¥101,644,484. Has many first-class correspondents abroad and its financial status is A1.

The Mitsubishi Bank.—Capital subscribed, ¥50,000,000 (¥30,000,000 paid up); Reserve, ¥32,000,000; Deposits, ¥470,586,307; Loans, ¥253,479,636; Bills discounted, ¥37,099,073; Foreign Bills of exchange purchased, ¥17,039,968. Has many excellent correspondents. The business policy of the bank is steady, "slow but sure" being the feature of its business transactions. After the quake disaster of September '23, the amount of deposits considerably increased in contrast to that of other banks.

The Dai-ichi Bank.—Capital, ¥67,500,000 paid up; Reserve, ¥58,450,000; Deposits, ¥520,884,118; Loans, ¥365,331,915. The business policy of the bank is rather conservative, but it is very attentive to the interests of its correspondents, many of whom are of first-rate financial status. Though the bank sustained

no small damage through the quake disaster it is fast recovering its former stability. The bank amalgamated with the Tokai Bank in '27.

The Sumitomo Bank.—Subscribed capital, ¥70,000,000 (¥50,000,000 paid up); Reserves, ¥23,250,000; Deposits, ¥552,780,090; Loans, ¥284,458,346; Bills discounted, ¥99,117,609; Foreign Bills of exchange purchased, ¥12,552,368. The stability of its financial foundation, good management and presence of men of ability on its staff combine to contribute to the sound development of the bank. The bank was the first of all other similar establishments to adjust and consolidate the losses sustained in the quake disaster and other liabilities of which the liquidation was considered difficult.

The Yasuda Bank.—Nominal capital, ¥150,000,000 (¥92,750,000 paid up); Reserve, ¥37,650,000; Deposits, ¥713,275,834; Loans, ¥597,899,219. The bank is the largest of all ordinary banks, in so far as the amount of capital, reserve and deposits are concerned, its greatness being due to the fact that it amalgamated or incorporated many smaller affiliated banks.

The Jugo Ginko.—Capital subscribed, ¥100,000,000 (¥49,750,000 paid up); Reserve, ¥32,870,000; Deposits, ¥209,414,133; Loans, ¥244,138,571; Bills discounted, ¥71,000,000. Involved in the crisis of 1927 it has been reduced to a precarious position and has inflicted serious loss on shareholders many of whom are Peers.

The Kawasaki-Daihyaku Bank.—Subscribed capital ¥33,988,500; Reserve, ¥4,200,000; Deposits, ¥818,103,028; Loans, ¥192,438,022. One of the oldest, it was founded by the late Hachiroemon Kawasaki in 1880. The Bank, formerly known as the Kawasaki Bank, amalgamated with the Daihyaku Bank in July '27 and assumed the present name.

FOREIGN EXCHANGE BUSINESS IN JAPAN

In its early days, Japan's foreign exchange business was almost entirely in the hands of British, American and other foreign banks, only a small part being transacted by Japanese concerns who had been engaged in business as Merchant Bankers for several centuries. A notable period in the evolution of Japanese banking was, therefore, that which saw the inauguration of the policy of founding exchange banks with purely Japanese capital. The first of these banks was The Yokohama Specie Bank, Limited, in 1880, followed by the Banks of Taiwan and Chosen. Then such leading private banks as Mitsui, Mitsubishi, Sumitomo, Dai-ichi, Dai-hyaku and Yasuda have opened foreign exchange departments, with the result that the greater part of the exports and imports is now financed by Japanese institutions. As an evidence how far their system has been carried to a state of greater efficiency the creation of a discount market a few years ago may be mentioned, this rendering great assistance in facilitating transaction. Another sign of development is shown in the presence of Exchange Brokers in the leading centres of overseas trade. Fluctuations of the exchange market recently according to the standard quotations of the Specie Bank are shown below:

Bank's Selling T. T. Rate

On New York

Year	January		May		October	
	Highest	Lowest	Highest	Lowest	Highest	Lowest
1925	38½	38½	41½	41½	43¼	41½
1926	44¼	43½	47¼	46½	48½	48½
1927	48¾	48¾	48.0	46¼	46¾	46¾
1928	47.0	46¾	47¾	46¼	—	—

Favorable reaction in 1925 was due to the marked improvement in foreign trade in consequence of brisk export of silk, the diminished imports occasioned by the enforcement of Luxury tariff, big speculative purchase of Yen in New York and Shanghai, and lastly the Government shipment of specie to New York to stabilize the exchange market.

BANKING STATISTICS

Remarkable as has been the development our banking business made, it still occupies a level far below that attained in Europe and America. There are too many petty banks, totalling at present as many as 1,000 banks approximately throughout the country. It is somewhat reassuring that the tendency toward amalgamation and expansion is perceptibly making head. From the outbreak of war till the end of 1921 banks that increased capital numbered 1587 with the total increment of roughly ¥1,583,000,000. Amalgamation resulted in the creation of 193 banks and the dissolution of 238 at the same periods, and whereas there were as many as 2,157 banks throughout the country at the end of 1913, the number decreased to 2,091 at the end of 1918, to 1,980 in '22, to 1,578 in '26 and then to 1,514 at the end of 1927, the gradual diminution being accounted for by amalgamation. The total amount of subscribed capital increased from about ¥507,701,000 at the end of 1913 to ¥2,954,445,000 at the end of 1927.

Inquiries made by the Oriental Economist of Tokyo give these data as to recent development of banking business in which is included the Branch Office of the Bank of Chosen in Japan proper (amount of money in ¥1,000):—

	No. of banks	No. of branches	Capital paid up	Reserve funds	Balance of deposits	Bills dis- countable and documentary bills
1925						
Bank of Japan...	1	15	37,500	70,425	657,011	454,697
Special banks....	33	198	378,924	194,471	1,140,432	726,354
Ordinary banks..	1,537	5,357	1,500,628	627,013	8,726,776	1,572,934
Savings banks ..	133	597	37,647	23,963	904,605	37,028
Total	1,704	6,167	1,954,699	915,872	11,428,823	2,791,014
1926						
Bank of Japan...	1	15	37,500	75,446	570,922	517,830
Special banks ...	33	209	386,039	210,775	976,653	684,716
Ordinary banks..	1,420	5,333	1,496,613	663,054	9,178,803	1,558,082
Savings banks...	124	594	41,351	27,414	1,067,551	46,094
Total	1,578	6,151	1,961,503	976,689	11,793,930	2,807,322

1927 (end of June)

Bank of Japan..	1	16	37,500	77,956	910,999	794,896
Special banks ..	32	213	386,801	218,915	1,233,427	717,660
Ordinary banks..	1,364	5,370	1,495,856	678,806	9,149,363	1,287,057
Savings banks..	117	572	41,505	29,139	87,831	—
Total	1,514	6,171	1,961,063	1,004,817	11,381,619	2,799,612

1925 Continued	Barrowings	Balance of loans	Deposits with others	Bonds, shares, etc. owned	Cash account
Bank of Japan..	—	265,142	50,093	273,485	305,797
Special banks...	836,230	2,151,049	317,558	557,698	109,781
Ordinary banks..	870,224	7,269,748	322,457	2,051,251	667,455
Savings banks..	8,253	154,853	235,602	526,650	17,243
Total	1,714,707	9,840,793	925,711	3,409,085	1,100,277

1926

Bank of Japan..	—	91,267	37,033	274,979	310,536
Special banks...	642,615	2,281,945	310,819	534,411	99,565
Ordinary banks..	916,769	7,661,118	314,479	2,158,366	695,217
Savings banks..	7,562	218,583	256,796	603,659	20,879
Total	1,566,947	10,252,942	919,126	3,571,415	1,126,197

1927 (end of June)

Bank of Japan..	—	37,546	60,030	243,276	318,129
Special banks...	532,224	2,320,915	334,384	630,263	85,024
Ordinary banks..	819,281	7,470,718	373,865	2,327,090	667,028
Savings banks..	8,697	237,747	184,868	620,379	22,488
Total	1,360,202	10,066,925	953,147	3,821,009	1,092,669

Loans Classified

The Treasury returns show that at the end of 1926 loans on books of banks throughout the country totalled about ¥7,270 millions analysed as follows:—

Secured	¥1,299,925,066
Notes	4,118,510,391
Overdrafts	1,231,602,925
Others	619,710,110
Total	7,269,748,492

The securities classified are as follows:—

National & Local bonds.....	¥ 192,290,716
Foreign debentures, etc.	1,826,658
Private debentures, etc.....	404,486,918
Stocks	1,989,159,757
Merchandises	367,787,267
Real estates	1,493,673,437
Ships	42,349,390
Economic foundations	50,419,595
Sundries	195,502,115
Guaranteed and on credit.....	2,532,752,639

Securities owned as asset consist of the following:—

National bonds and debentures....	¥ 982,783,710
Local " "	188,177,905
Foreign " "	10,017,437
Private debentures	534,215,506
Stocks	336,056,755
Total	2,051,251,313

Liabilities of Banks (June 30th, 1927; in ¥1,000)

	Bank of Japan	Specie Bank	Kwangyo Ginko	Noko Ginko	Colonial Bank	Bank of Taiwan
Capital, nominal	60,000	100,000	96,000	104,400	20,000	45,000
Reserve funds..	77,956	96,873	41,163	53,320	7,676	1,906
Notes issued ...	1,464,604	7,205	—	—	—	43,546
Debenture loans.	—	—	761,051	397,070	105,460	—
Deposits	910,999	588,329	77,986	150,412	68,246	104,835
Bills re-discounted	—	120,856	—	—	—	272,441
Debts	—	154,171	—	—	—	260,376
Temporary debts	32	1,986	—	—	2,153	1,795
Branch accounts	—	—	—	—	—	—
Net profits	9,538	15,179	8,247	9,643	1,516	—
Other account ..	65,703	150,005	28,809	73,475	3,294	162,349
Total	2,588,832	1,234,555	1,013,167	808,321	208,345	832,149

	Continued	Industrial Bank	Bank of Chosen	Ordinary Banks	Savings Banks	Total	Total for 1926 (June)
Capital nominal ..	50,000	40,000	2,377,735	97,045	2,990,180	2,975,720	
Reserve funds ...	17,066	711	678,806	29,140	1,004,817	947,999	
Notes issued	—	89,317	—	—	1,604,672	1,519,470	
Debenture loans	268,551	—	—	—	1,532,133	1,443,875	
Deposits ...	49,022	194,686	9,149,363	87,831	11,381,619	10,728,209	
Bills re-discounted ..	—	16,223	120,566	—	530,086	500,148	
Debts	19,400	158,277	819,281	8,697	1,360,202	1,550,815	
Temporary debts	156	6,923	266,977	—	278,973	340,496	
Branch accounts .	—	—	2,495,943	427,619	2,923,562	2,807,851	
Net profits.	3,125	784	169,785	9,099	226,917	226,720	
Other accounts .	79,658	30,859	491,694	33,873	1,139,621	1,199,979	
Total ...	486,977	536,980	16,573,348	1,617,619	25,900,295	25,118,523	

Assets of Banks (June 30th, 1927; in ¥1,000)

	Bank of Japan	Specie Bank	Kwan-gyo Ginko	Noko Ginko	Colonial Bank	Bank of Taiwan
Specie	318,129	33,470	2,308	5,877	3,940	8,216
Bullions	811,392	4,396	—	—	—	15,244
Loans	37,546	191,635	798,480	558,777	128,311	162,452
Bills discountable	794,896	143,974	—	7,642	42,575	372,648
Bills bought.....	—	422,631	—	—	—	45,503
Documentary bills	—	—	—	—	3,723	16,039
Bonds, shares, etc.	243,276	262,428	69,596	36,389	6,116	77,080
Deposits	60,030	66,624	99,863	91,587	4,356	10,918
Land, building, etc.	4,771	19,367	6,804	7,522	9,366	9,563
Inter-bank loans	55,169	2,116	—	—	2,018	3,411
Branch accounts	—	—	—	—	—	—
Capital unpaid .	22,500	—	24,124	16,350	7,500	5,625
Loss	—	—	—	—	—	28,171
Other accounts..	41,125	87,915	11,992	84,177	440	77,279
Total	2,588,932	1,234,555	1,013,167	808,321	208,345	882,149

BANKS AND BANKING BUSINESS

453

Continued	Industrial Bank	Bank of Chosen	Ordinary Banks	Savings Banks	Total	Total for 1925 (June)
Specie	1,684	29,527	667,028	22,488	1,092,669	1,079,490
Bullions	—	15,875	—	—	846,906	835,456
Loans	202,245	279,015	7,470,718	237,747	10,006,925	9,894,468
Bills dis- countable ...	89,797	29,072	1,199,343	31,934	2,711,878	2,570,791
Bills bought...	911	16,935	160,503	—	646,483	620,311
Document- ary bills	—	12,192	87,714	—	119,668	139,716
Bonds, shares, etc. ..	78,244	100,410	2,327,090	620,379	3,821,009	3,555,926
Deposits	55,573	5,462	373,865	184,868	953,147	905,744

Continued	Industrial Bank	Bank of Chosen	Ordinary Banks	Savings Banks	Total	Total for 1925 (June)
Land, build- ing, etc...	5,226	11,442	397,220	29,356	500,636	440,608
Inter-bank loans	48,511	3,270	135,140	—	449,635	334,462
Branch accounts.	—	—	2,500,427	427,394	2,927,821	2,842,800
Capital unpaid	—	15,000	882,478	55,540	1,029,116	1,027,226
Loss	—	—	58,608	1,345	88,123	36,136
Other accounts .	4,786	18,780	313,216	6,569	646,280	835,390
Total	486,977	536,980	16,573,348	1,617,619	25,900,295	25,118,532

Leading Ordinary and Savings Banks

(As existing at the end of June, 1928; in ¥1,000)

Tokyo

Name of Banks	Capital paid-up	Reserves	Deposits	Loans
1st Bank	57,500	58,450	520,884	365,331
15th "	100,000	—	153,268	208,306
30th "	700	370	2,362	1,563
Kawasaki-Daihyaku Ginko.	23,072	4,200	318,103	192,438
Tanaka Ginko.....	1,000	532	1,830	2,495
Mitsubishi "	30,000	32,000	470,586	253,479
Mitsui "	60,000	58,400	560,334	431,001
Yasuda "	92,750	57,650	745,222	597,899
3rd "	4,000	40	14,030	70,658
Koike "	3,000	1,250	1,727	4,483
Morimura "	2,080	1,430	24,160	19,043
Showa "	2,500	—	45,483	57,181
Nishiwaki "	3,000	550	5,031	9,592
Taisho "	2,000	378	—	7,398
Tetsugyo "	1,500	372	2,714	3,483
Nippon Chuya Ginko.....	6,250	457	57,511	58,194
Tokyo Yamaguchi "	1,000	88	1,584	3,103
Furukawa "	6,250	1,590	41,042	33,290
Hibiya "	1,550	510	5,753	5,148
Yasuda Savings Bank.....	2,072	1,795	83,215	8,080
Shinyu Ginko	2,312	—	4,063	8,508

Osaka

Name of Banks	Capital paid-up	Reserves	Deposits	Total
34th Bank	39,700	23,100	214,113	190,487
Yamaguchi Ginko.....	27,500	12,600	190,294	143,116
Sumitomo	50,000	26,411	230,003	231,152
Konolke	10,000	4,718	91,486	58,449
Osaka Noko	7,000	5,030	4,373	60,521
Kashima	9,437	7,140	51,509	76,463
Bishu	3,000	1,487	13,723	8,656
Osaka Savings Bank.....	2,000	5,480	110,090	5,198
Fujimoto Bill-broker Bank.	3,000	6,941	1,779	23,910
Fujita Ginko	5,375	1,130	35,270	112,165
Osaka Nomura Ginko.....	10,000	7,007	76,794	63,006
Nippon Shintaku	17,500	2,480	25,576	42,992

Nagoya

Ito Ginko	1,000	1,343	9,209	7,601
Nagoya Ginko	13,500	8,150	51,958	33,199
Aichi Ginko	11,800	7,950	57,468	43,643
Meiji Ginko	11,880	3,495	42,729	43,938
Aichi Nosho Ginko.....	4,000	880	12,564	11,980
Nippon Savings Bank.....	1,148	2,031	31,199	2,307
Bizan Ginko	2,172	948	4,317	7,404

Yokohama

2nd Bank	1,500	103,821	177,497	71,754
Hiranuma Ginko	750	75	1,702	1,704
Yokohama Wakao Ginko...	500	399	2,907	7,082
Yokohama Boeki	237	34	288	400
Watanabe Ginko	2,000	598	9,186	6,452
Yokohama Koshin Ginko...	250	1,250	40,045	27,484
Yokohama Shogyo Ginko...	480	3	226	453

Kobe

65th Bank	6,250	129	5,616	8,415
Hyogoken Noko Ginko.....	9,000	5,700	21,759	98,087
Kobe Okazaki	12,500	6,778	18,510	20,492

MONETARY ORGANS FOR POORER CLASSES

Banking organs for poorer classes are still sadly inadequate in Japan. There are no people's banks, and at present, besides the ancient institutions of pawnbroking and *Mujin*, the only banking facilities available for those people are postal savings banks and credit associations.

Pawnbroking

According to the inquiries of the Home Office, the number of licensed pawnbrokers existing in Japan proper are as follows:—

1918	1920	1921	1923	1924
27,700	24,782	23,587	17,696	17,852

The term of deposit differs from 3 to 6 months, according to articles, and the rate of interest charged ranges between the two extremes of 48% and 20% as converted into a yearly rate.

The general situation of the business may be gathered from the following statistics:—

Year	No. of pawns accepted (1000)	Money advanced (Yen 1000)	No. of pawns redeemed (1000)	Money repaid (Yen 1000)	Pawns forfeited (Yen 1000)
1918	41,389	116,750	33,885	102,103	9,251
1920	31,610	152,799	25,523	111,894	11,021
1921	28,297	195,908	23,700	158,510	17,146
1923	11,925	129,496	15,324	96,079	11,696
1924	24,523	155,810	16,013	111,248	14,545

Public Pawn Shops.—These run either as foundations or under communal management accommodate the poor with loan at lower interest and with other advantages. At the end of June 1925 there were 41 of them, the oldest being the village pawnshop at Hosoda, Miyazaki Prefecture, founded in 1912. Tokyo has 12 such establishments in slum quarters, mostly conducted by the Social Works Association of Tokyo Prefecture.

"Mujin"

It was originally a mutual help association that was organized for various purposes. As existing at present the members of a "mujin," by which title this kind of association is now generally known, have to bring at each meeting a certain amount of fixed subscription. They then determine by drawing a number of members to be allowed to make use of the money collected at each meeting, and this is continued till all the members get their turn. This primitive help contrivance has been very much abused lately, being too often made a means of fraud by some unscrupulous "promoter," resulting in the enforcement of a revised regulation on Nov. 1st, '15. The fund of a "mujin" as existing in money must not fall below ¥15,000 or 30,000 in other form of assets. A "mujin" may not engage in any other additional business without license. At the end of 1926, these pseudo banks, conducting the business or supplying the funds for these "mujin" numbered 243 representing ¥26,042,000 nominal.

Credit Associations in City Land

The business of those associations is to lend money to their members in order to develop their economic conditions and to handle the savings of their members, the families of their members, public corporations or legal persons who do not aim at profit. The number of these associations at the end of 1925 was 224 with a paid up capital of ¥23,856,000.

RATE OF INTEREST

In the following tables "sen" means interest per ¥100 on daily balance and 1 sen a day amounts to 3.65% a year.

The Bank of Japan

Dec. Stat	Loans (sen)		Discount (sen)		Commercial bills (sen)		Over- drafts (sen)	Fixed deposits one year percent
	Gov't bonds	other securities	Gov't bonds	other securities	Discounted in Tokyo	Discounted out Tokyo		
1926	1.80	2.00	1.80	2.00	1.80	1.80	2.10	3.00
1927	1.60	1.70	1.60	1.70	1.50	1.50	1.90	3.00
*1928	1.60	1.70	1.60	1.70	1.50	1.50	1.90	3.00

* End of June.

Market Rate, Tokyo

	Loans (secured) (sen)			Discounts (sen)			Current deposits (sen)		
	High.	Low.	Aver.	H.	L.	A.	H.	L.	A.
1926	3.40	1.64	2.50	3.20	1.50	2.42	1.40	0.60	0.67
1927	3.10	1.64	2.53	3.20	1.07	2.23	1.20	.30	.49
*1928	3.30	1.64	2.44	3.30	.95	2.12	1.20	.30	.48

* End of June.

Market Rate, Osaka

	Loans (secured) (sen)			Discounts (sen)			Current deposits (sen)		
	High.	Low.	Aver.	H.	L.	A.	H.	L.	A.
1925	2.74	2.32	2.50	2.57	2.08	2.30	—	—	—
1926	2.56	2.18	2.34	2.46	1.92	2.19	—	—	—
1927	3.09	2.51	2.83	3.13	2.60	2.80	1.06	0.86	0.93

Rate on Real Estate

According to the inquiries of the Nippon Kangyo Ginko, the average rate of interest on immovables in April '28 was 11.75% or 11.54% excluding Okinawa and Hokkaido. These figures are above those of the preceding year by 0.11% and 0.07% respectively.

For purpose of comparison figures for the last few years are given below:—

	1925	1926	1927	1928
Average rate throughout Japan...	11.83%	11.74%	11.64%	11.75%
Average, Okinawa & Hokkaido excluded	11.63%	11.52%	11.47%	11.54%

BILL-BROKING BUSINESS

As most of our banks regard note discounting as part of the proper sphere of their business, they are not so willing to furnish call money to bill brokers. They generally do so only when they have surplus funds remaining idle on their hands. The broking business therefore does not yet possess in Japan a sufficiently congenial atmosphere for its sound development.

The first broking house made its appearance in Japan in September, 1899, in Tokyo, and the second in May, 1912, in Osaka. At present the houses that are undertaking it either exclusively or in combination with other business number over thirty. Of

these three in Tokyo, four in Osaka, and one each in Kobe and Nagoya, are relatively more important than the others.

THE TRUST BUSINESS

It was about 1906 that "trust companies" were first established in Japan, and these at the end of 1921 numbered 514 in capital of ¥347 million, of which 109 million was paid up. Some including 487 joint stock companies with an aggregate authorized of these trust companies, however, were by no means on a sound basis while the business dealt in by them was diverse and in many cases hardly entitled to be called trust business as it is known in Europe and America. Absence of a law to control this particular agency business was responsible for all these defects.

The Trust Law and Trust Business Law, newly enacted in '22 and enforced on Jan. 1, '23, had a salutary effect on the sound and legitimate development of trust business in Japan. According to the laws, trust business can be carried on only by a joint stock company with a capital of not less than ¥1 million, the properties acceptable by it being limited to money, negotiable papers, monetary claims, movables, land and things thereon, and superficies and lease of land. The old established companies had to obtain new permits for continuing business, and up to the end of 1926 33 companies were granted charters for conducting business in accordance with the provisions of the new laws, their combined nominal capital being ¥230,800,000; paid-up capital, ¥67,255,000; reserve funds, ¥7,362,000; money trust, ¥566,149; other trust, ¥376,791,000; loans and advances, ¥1,734,257,000; bonds and securities, 230,931,000.

Remarkable is the development of this line of business during the last two years, particularly after the banking panic of 1927. At the end of June '28 there existed throughout the country 37 trust cos. with the amount of money and other property accepted totalling ¥1.129 millions as against ¥115 millions of 23 cos. at the end of the same period of 1924.

Below is given a comparative statistics for the 1st half year of 1927 and 1928:

	1st half 1927	1st half 1928
Money trust	¥531,967,223	¥ 838,327,023
Money trust other than monies.....	12,860,532	16,587,027
Negotiable securities in trust.....	134,650,988	179,670,778
Liabilities	47,812,940	40,137,222
Lands & properties thereon.....	21,333,895	23,330,219
Superficies in trust.....	11,510	11,510
Land lease in trust.....	114,000	57,000
Total amount	748,751,090	1,098,120,781

The accounts of the associated cos. at end of April '28 as compared with the same period of the previous year stood as follows:

City	End of Apr.	Liabilities	Negotiable securities	Loans	Securities advanced	Immovables	Deposits
Mitsui	1928	309,461	79,405	194,118	10,744	3,177	20,359
	1927	225,201	69,174	133,638	11,116	2,918	5,920
Yasuda	1928	190,256	62,884	112,355	5,930	1,694	7,225
	1927	135,731	10,934	102,991	9,904	1,216	6,637
Sumitomo	1928	143,978	49,466	90,573	2,275	636	1,008
	1927	83,137	11,957	69,240	1,289	286	349
Mitsubishi	1928	83,771	26,011	51,888	4,958	586	298
	1927	5,160	868	2,427	—	300	1,563
Kansai	1928	56,766	3,222	46,225	57	4,007	3,117
	1927	47,147	28,687	38,945	242	3,602	1,592
Others	1928	180,151	57,805	106,091	1,830	4,622	9,244
	1927	78,776	15,837	71,864	1,806	1,885	5,225
Total (includ. others)	1928	1,084,863	291,019	695,344	27,942	26,312	41,551
	1927	717,659	131,474	527,161	25,543	22,548	22,077

CLEARING HOUSES

Tokyo Clearing House.—The Tokyo Clearing House commenced its business at the end of 1887. More or less good result was realized, but the subsequent development of banking business has necessitated the form as it now stands. Its organization is mainly based on that of the clearing-house in Europe and America.

Osaka Clearing House.—Founded in 1879 the Osaka Clearing House is the first clearing house established in the country. In Osaka, the centre of trade in our country since old time, cheques and bills were in use long before the Restoration, and it took the lead in introducing clearing house facilities.

Kyoto, Yokohama, Kobe, Nagoya, Shimonoseki-Moji, Hiroshima, Kanazawa, Hakodate, Otaru, Sapporo, Fukuoka, Nagasaki, Niigata, Kumamoto, Okayama, Sendai and Metsue have clearing-houses of their own.

Volume of Clearing House Business in Japan

The volume of clearing business in the last three years is as shown below:—

Place	Amount Cleared Yen 1,000		
	1926	1927	*1928
Tokyo	39,460,447	27,327,474	15,061,510
Osaka	28,386,749	20,386,748	10,602,131
Kyoto	2,062,003	1,499,100	752,179
Yokohama	1,972,970	1,711,072	782,690
Kobe	9,861,565	6,079,814	3,039,596
Nagoya	3,436,365	2,678,793	1,390,601
Hiroshima	330,112	239,774	110,869
Shimonoseki-Moji	772,637	525,202	263,488
Kanazawa	170,104	144,720	80,840
Hakodate	270,037	258,757	112,186
Otaru	483,615	433,816	188,852
Others	1,717,319	1,405,434	766,701
Total	88,923,923	62,436,049	33,151,643

* Figures for 1st half.

CURRENCY SYSTEM

Coinage

Prior to the adoption of the gold standard in 1897, Japan was practically a silver country subject to all the disadvantages attending an ever fluctuating value of this particular specie. That reform has placed her at par, so to say, with the leading Powers of the world. The principal points in the currency system as amended in 1922 are as follows:—

1. The unit of the coinage to be 2 fun of pure gold (0.75 grams) and to be denominated one yen.
2. The gold coins to be of three denominations, 5 yen (1.1111 momme) coins, 10 yen (2.2222 momme) coins, and 20 yen (4.444 momme) coins. (1 momme=3.750 grams.)
3. Subsidiary silver pieces to be of three denominations, 10 sen (0.400 momme) pieces, 20 sen (0.528 momme) pieces, and 50 sen (1.320 momme) pieces.
4. Other subsidiary coins, i.e. 5 sen (0.700 momme) and 10 sen (1.00 momme) nickel pieces, 1 sen (1.00 momme) pieces, 5 rin (0.560 momme), 2 sen and 1 rin pieces, issued before to continue in circulation as before.
5. The regulation fineness of the coins is as under:—
 Gold coins, 900 gold and 100 copper.
 Silver coins, 720 silver and 280 copper.
 Nickel coins, 250 nickel and 750 copper.
 Copper coins, 950 copper and 40 tin and 10 zinc.

N.B.—Gold coins are of $\frac{1}{2}$ fineness compared with those coined before.

The Convertible Note System

The law as first issued in 1884 provided that the notes would be convertible into silver, but with the adoption of gold monometallism in 1897 the notes became convertible into gold, as is the case to-day. According to the law the Bank of Japan is to keep as conversion reserve gold and silver specie and bullion equivalent in amount to the notes issued, the silver coins and bullion not to exceed one quarter of the total reserve. The Bank may issue notes within the limit of ¥120,000,000 on the security of Government bonds, Treasury bills, and other reliable papers; also against such negotiable securities. The Bank, subject to the permission of the Government, may further issue notes, when such excess issue is deemed necessary, the tax payable being at rate not less than 5% a year on such issue. The denominations of notes are ¥1, ¥5, ¥10, ¥20, ¥50, ¥100, ¥200, but in practice ¥50 and ¥200 notes are yet non-existent.

The convertible system practically identical with that in Japan Proper is also in force in Formosa where the additional issue against the reliable securities is limited to ¥10,000,000 and the tax at the same rate payable on the excess issue.

Amount of Coins and Paper Currency in Circulation

The amount of coins in circulation at the end of December 1920 totalled ¥214,367,000, the figure being composed of ¥61,070,000

gold coins, ¥126,689,000 silver coins, ¥13,299,000 nickel coins and ¥13,308,000 copper coins. After 1921 the amount of coins in circulation has not been made public, though the rough figures of the amount for the five years ending 1925 are returned as ¥2,133,612,000 for 1921; ¥2,203,448,000 for 1922; ¥2,288,775,000 for 1923; ¥2,256,057,000 for 1924; ¥2,225,817,000 for 1925. The amount of paper currency in circulation for the past few years is shown in the following table (in ¥1,000):—

End of Dec.	Govt. petty notes	Bank of Japan notes	Bank of Chosen notes	Bank of Taiwan Notes	Total
1923	68,000	1,703,597	110,233	39,703	1,921,533
1924	25,887	1,625,898	129,118	51,260	1,832,164
1925	17,500	1,599,206	122,540	53,086	1,770,433
1926	14,492	1,541,645	110,436	48,640	1,715,714
1927	13,590	1,632,390	124,527	53,692	1,874,109

Coins Turned out by the Mint

		1924 Yen	1925 Yen	1926 Yen
Gold coins	{ 20 yen	—	—	—
	{ 10 "	—	—	—
	{ 5 "	11,520	—	—
	{ Total	11,520	—	—
Silver coins	{ 50 sen	39,260,000	23,904,000	16,289,000
	{ 20 "	—	—	—
	{ 10 "	—	—	—
	{ Total	39,260,000	23,904,000	16,289,000
Nickel coins	{ 10 sen	1,685,000	5,447,500	5,867,500
	{ 5 "	—	—	—
	{ Total	1,685,000	5,447,500	5,867,500
Copper coins		1,044,400	28,100	—
Grand total		42,000,920	29,369,600	22,153,500

Bulletins of the Bank of Japan (¥1,000)

End of Jan.	Notes issued	Specie reserve (Gold coin & bullion)	Government bonds & other securities					Total	Excess issue of note
			Gov't bonds	Gov't securities	Treasury bills	Other securities	Com'l bills		
1923.....	1,330,560	1,059,000	94,228	22,000	—	112,750	102,572	331,500	211,500
1924.....	1,387,764	1,056,006	20,840	22,000	—	181,967	97,000	330,768	216,768
1927.....	1,420,160	1,056,133	140,352	22,000	—	70,611	114,024	342,017	242,017
1928.....	1,424,506	1,061,757	85,770	22,000	—	37,823	217,285	362,856	242,856

—at end of June

THE CENTRAL BANK FOR COOPERATIVE SOCIETIES

This is a new monetary organ established in 1923 for regulating the circulation of fund of the Association of Cooperative Societies and of similar industrial organizations and for bringing it into close touch with the central money market. Its capital is ¥30,000,000, subscribed half and half by the Government and the Cooperative Societies, over 80% of the total number existing in the country. It was opened for business in April 1924 with

the capital of ¥13 mil. (¥10 mil. from Government and 3 from Societies).

Lines of business to be dealt with by the Bank are:—

1. To supply to the Association of Cooperative Societies or Industrial Societies associated with it loans without security and redeemable within a period of not more than five years.
2. To discount drafts for or allow over-draft of those industrial organizations.
3. To undertake exchange business for them.
4. To receive money as deposit from the Association of Cooperative Societies, Industrial Societies, Public Cooperations or legal persons not engaged in business aiming at profit.

When judged necessary the Bank may require security on business coming under 1 and 2 clauses.

The Bank is also authorized to issue Industrial debentures within the limit of one-thousand times the paid-up capital.

The President, Deputy President, Directors and Auditors (each 3), Counsellors 20 (not less than one half to be members of the Cooperative Societies), are nominated by the Government, which also appoints a Supervisor. The Bank is under the control of the Ministers of Com. & Ind. and of Finance. The Staff consists of E. Okamoto (ex-Vice-Min. of Ag. & Com.), S. Sugano, Y. Hashimoto, M. Kato.

FOREIGN BANKS IN JAPAN

The branches in Japan of foreign banks numbered at the end of 1926 twenty-two in all with paid up capital of ¥7,125,000.

According to nationality of their head offices, they are:—

Nationality	Name	Branches in Japan	
		No.	Location
Gt. Britain	Hongkong & Shanghai Banking Corporation	4	Kobe, Nagasaki, Yokohama, Tokyo
	Chartered Bank of India, Australia & China.....	3	Yokohama, Tokyo, Kobe
U. S. A.....	National City Bank of New York.....	4	Yokohama, Kobe, Tokyo, Osaka
	American Express Company	1	Yokohama
France.....	Banque Industrielle de Chine.	1	Yokohama
	Banque Franco-Japonaise...	3	Tokyo, Yokohama, Kobe
Russia.....	Russo-Asiatic Bank	1	Yokohama
	Bank Dalne-Vostochnii Akzionernii	1	Kobe
Germany...	Deutsch-Asiatische Bank...	2	Kobe, Yokohama
Holland....	Nederlandische Handel-Maatschappij	1	Kobe
	Nederlandsch-Indische Handels-bank	3	Kobe, Yokohama, Tokyo
China.....	Tientsin Commercial and Industrial Bank	1	Osaka

The business situation of these foreign banks in recent years
is as below (in 1,000):—

Dec.	Capital	Deposits	Loans	Net profits
1919	¥ 6,495	55,591	21,493	4,646
1920	¥ 7,495 } \$50	49,950	22,359	7,431
1921	¥ 7,495 } \$50	45,812	21,156	1,600
1922	¥ 7,495 } \$50	45,812	21,156	1,600
1923	¥ 7,495 } \$50	45,812	21,156	1,600
1924	¥10,325	45,812	—	—
1925	¥10,325	45,813	—	—

CHAPTER XXVIII

FINANCE

INTRODUCTORY REMARKS

In reviewing the history of our national finance since Imperial Government was rehabilitated in 1868 the first stage from that year to 1871 may be considered as the period of financial unification required for reducing into uniform system the monetary and other financial matters arbitrarily dealt with by some 260 semi-independent feudal governments that had divided the country in those days when no less than 1600 kinds of paper notes were in circulation. The decade from 1871 to 1881 is memorable for the financial crisis occasioned by the outbreak of civil troubles in quick succession and for the heavy depreciation of currency. This period was succeeded by that of adjustment, the establishment of a central bank and the convertible system, and the restoration of currency to par. From the opening of the Imperial Diet in 1890 till the Sino-Japanese war of 1894-5 the Government had to adhere strictly to the policy of retrenchment under the vigilant supervision of the peoples' representatives. This resulted in a large surplus in the central coffer, and it stood in good stead when the hostility broke out.

Sino-Japanese War & Financial Expansion.—Predominant feature that marks the national finance since the time of the Sino-Japanese war has been steady expansion in all phases of economic and financial activity. On the occasion of said war in which the actual warfare lasted for nine months the war chest was estimated at ¥250 millions, to be met with the revenue surplus and loans. The war had expansive effect on national economy. Japan's foreign loan increased by ¥143 millions as a result of the war. Then the State expenditure that stood at only ¥85 millions in 1893 had soared up by 1896 to ¥168 millions and to ¥289 millions in 1902. During the same period peoples' burdens shot up from ¥80 millions to ¥2,200 millions. One special permanent benefit incidental to the war was the establishment of gold system with fund set apart from the war indemnity and other payments received from China totalling ¥370 millions.

The Russo-Japanese war that lasted 16 months cost Japan about ¥1,500 millions war outlay. The war was of grave consequence to the finance of the country, as Japan got no indemnity at all. The result was as much as ¥1,500 millions was added to the national debt. In other words, the debts jumped up from under ¥609 millions in 1903 to over ¥2,454 in 1906. Then the temporary war taxes amounting to ¥180 were made permanent. The increasing expenses incidental to expansion of national defence measures and other costly undertakings, and also the serious economic reaction following the war boom obliged the authorities to adopt a policy of contraction and retrenchment.

The European War.—This policy was thwarted by the outbreak of the Great War, when, owing to advantageous position Japan occupied, there occurred a marked increase in exports over imports. ~~This favorable balance being~~ estimated to have run up to ¥3,500 millions in merchandise, shipping and also in invisible trade. For the first time in her financial history Japan was able to extend help to the Allies, i.e. ¥220 millions to Russia, ¥285 to England, and ¥133 to France, besides ¥220 to China, the two accounts reaching ¥1,400 millions at one time.

The temporary boom tempted both Government and public to adopt the policy of expansion in their undertakings. Thus between 1914 and 1922 the General Budget advanced from ¥650 millions to ¥1,500 millions and the Special Account from ¥690 millions to ¥3,130 millions. The provincial governments and the self-government civic bodies also expanded their aggregate expenditure during the same period from ¥320 millions to ¥1,150 millions.

The consequence is the people's public burden increased threefold, or from ¥1,300 millions to ¥3,900 millions, while the per capita taxation rose from ¥11.22 in '14 to ¥32.70 in '22. Similarly the per capita figure of public bonds, national and local, advanced at the same time from ¥49.43 to ¥75.38.

The Contraction Policy.—Then followed the policy of contraction, but this was all of a sudden dislocated by the catastrophe of 1923 which caused loss, as generally estimated, of no less than five thousand million yen, besides demanding an enormous sum of money for the work of rehabilitation. As soon as matters of pressing need were provided for as an emergency measure, the Government decided to reorganize the administrative system, retrench expenditures and postpone the prescribed undertakings. Also it adopted a no-home-loan policy. Thus the Kato cabinet in 1925 economized ¥256,000,000 in the prescribed program, while the local governments too cut down their expenditures by ¥10,000,000

STATE REVENUE AND EXPENDITURE

Fiscal year	Revenue (yen 1,000)			Expenditure (yen 1,000)			Surplus (yen 1,000)
	Ord.	Extra.	Total	Ord.	Extra.	Total	
1924-25	1,438,640	688,751	2,127,391	1,051,010	574,014	1,625,024	502,367
1925-26	1,443,235	628,137	2,071,372	1,016,289	508,699	1,524,989	546,383
1926-27	1,452,409	603,951	2,056,361	1,081,993	496,833	1,578,826	477,534
1927-28	1,458,151	300,818	1,758,970	1,184,526	574,444	1,758,970	297,042
1928-29	1,484,366	224,733	1,709,099	1,199,973	509,127	1,709,100	—

N.B.—Figures for the last two fiscal years show budget estimates; those for the others settled account.

Average per Capita of Population

	Rev. yen	Exp. yen		Rev. yen	Exp. yen
1923-24	¥34.90	¥25.99	1926-27	¥34.40	¥26.42
1924-25	35.97	24.47	1927-28	33.68	28.79
1925-26	34.67	25.53	1928-29	27.87	27.87

N.B.—The figures for 1924-25 represent settled accounts; those for 1925-26 and 1926-27 the actual account as existing on

Sept. 30, 1926 and July 31, 1927 respectively, and those for 1927-28, and 1928-29 budget estimates.

BUDGET FOR THE YEAR 1928-29

As the 54th session of the Imperial Diet was dissolved the Government has been obliged to compile the Working Budget for the current fiscal year as based on the previous fiscal year's appropriations with some alterations. The Working Budget amounts to ¥1,709,100 both in revenue and expenditure, including supplementary estimates coming up to approximately ¥77,869,000 for both sections as approved in the 55th (special) session of the Diet. The total ¥1,709,100 shows a decrease of ¥29,959,000 below the previous fiscal year's figure.

	Revenue (Yen 1,000)	Expenditure (Yen 1,000)
Ordinary	1,484,366	1,199,973
Extraordinary	224,734	509,127
Total	1,709,100	1,709,100
Do for '27-28.....	1,730,059	1,730,059
Decrease	29,959	29,959

Further details are given below:—

Revenue (in ¥1,000)

Ordinary:

Taxes & Duties.....	901,477
Stamp receipts	79,157
State enterprises & property.....	473,343
Miscellaneous revenues	19,618
Transferred from Deposit Dept. special account	3,324
Transferred from funds for education reform & agrarian development	7,446
Total ordinary revenue.....	1,484,366

Extraordinary

Sale of State property.....	6,899
Miscellaneous receipts	7,990
Local payments of expenses for public works..	2,780
Local contributions of expenses for public works	10,037
Transferred from special accounts funds.....	13,912
Proceeds from issue of loans.....	64,000
Transferred from previous year's account.....	115,550
Other receipts	3,520
Total extraordinary revenue.....	224,733
Grand total	1,709,099

Expenditure (in ¥1,000)

Ordinary

Civil list	4,500
Foreign Affairs Department.....	16,286
Home Affairs Department.....	42,950
Finance Department	348,726
War Department	176,082
Navy Department	143,473
Justice Department	32,515
Education Department	118,648

Agricultural and Forestry Department.....	26,521
Commerce and Industry Department.....	4,919
Communications Department	286,153
Total ordinary expenditure.....	1,199,973

Extraordinary

Foreign Affairs Department.....	3,066
Home Affairs Department.....	166,087
Finance Department	57,098
War Department	48,071
Navy Department	118,972
Justice Department	2,400
Education Department	20,607
Agriculture and Forestry Department.....	27,542
Commerce and Industry Department.....	6,684
Communications Department	58,399
Total extraordinary expenditure.....	509,127
Grand total	1,709,100

The extraordinary expenditure (for Home Dep't) includes the reconstruction appropriations as follows (in ¥1,000):—

Reconstruction outlay	24,046
Reconstruction loans	11,515
Subventions	16,181
Interest granted for local reconstruction loans	7,408
Reconstruction Bureau	2,909
Total	62,059

Special Accounts

The Special Account as distinct from the General Account nominally makes enormous figures both in revenue and in expenditure, but as many of the items are repetitions of either the General Account or the Special Account items, the actual figures are far less. The Special Account items number about 30, of which the following are principal ones in the Budget for the year 1928-29 (in ¥1,000):—

	Revenue	Expenditure
Formosan Government-General	109,246	109,246
Korean Government-General	222,674	222,674
Kwantung Administration Office.....	20,874	20,874
Karafuto Administration Office.....	27,340	27,340
South Sea Islands Adm. Office.....	4,673	4,673
Government Railways	654,562	514,001
Mint	16,251	5,172
Printing Bureau	8,966	7,322
Monopoly Bureau	339,540	173,860
Deposit Department	115,072	97,535
National Loan Sinking Funds.....	799,980	799,980
Imperial Universities	24,461	24,461
Gov. Colleges	7,459	7,459
Post Office Insurance.....	120,476	47,521
Cultural Undertakings in China.....	4,680	2,950
Total incl. others.....	3,552,219	3,118,459

The expenditure in the 1928-39 Budget estimate totalling ¥1,703,261,000 is apportioned as follows according to the different lines of outlay:—

	Amount	Percentage
Civil list	¥ 4,500,000	0.02
Administration	784,751,000	46.00
National defence	483,275,000	28.00
National loans	289,662,000	17.00
Pension & annuity	141,072,000	8.98
Total	1,703,261,000	100.00

CONTINUING EXPENDITURES

Extraordinary expenditures exist in greater part in the shape of continuing expenditures, some of which extend over 20 years. These disbursements as they existed at the end of March 1927 (in ¥1,000) are as follows:—

General Account

	Total amount	Disbursed by 1927-28	Allotment for 1928-29	Allotment for 1929-30
Foreign Affairs Dept.....	330	150	130	50
Home Affairs Dept.....	1,226,051	793,592	98,865	61,508
Finance Dept.	158,632	77,403	22,452	17,899
War Dept.	1,091,792	450,696	42,636	41,894
Navy Dept.	1,073,004	606,485	109,496	110,802
Justice Dept.	14,317	10,471	2,470	840
Education Dept.	171,285	95,118	12,493	14,447
Agr. and For. Dept.....	6,024	3,425	1,130	1,172
Com. and Ind. Dept.....	3,001	2,097	107	468
Communications Dept.	617,431	490,160	53,167	50,074
Total	4,361,867	2,529,597	342,946	299,154

Special Account

Korean Govt.-General	698,907	318,558	29,699	29,300
Formosan Govt.-General	90,777	54,689	10,417	8,363
Kwantung Govt.-General	14,651	4,104	1,996	2,669
Saghalien Adm. Office.....	34,053	29,831	2,832	1,389
Imperial Universities	17,308	7,810	2,958	2,390
Government Iron Foundry....	103,241	100,621	1,325	1,294
Government Rlys.	3,363,235	2,271,575	222,491	228,299
Total incl. others.....	4,337,769	2,796,224	273,989	275,127

Net Expenditure for 1926-7 & 1927-8

The actual account of the State expenditure for fiscal years 1926-27 and 1927-28 amounted to ¥1,639,382,000 and ¥1,758,969,000 respectively. The principal items are as follows:—

	1926-27 (Yen 1,000)	1927-28 (Yen 1,000)
Civil list	4,500	4,500
Administration	822,546	728,320
National defence	489,102	467,654
National loans	244,353	296,386
Pension & Annuity.....	128,879	136,715
Subsidies	—	117,444
Treasury reserves	—	14,000
Total	1,639,382	1,758,969

DEPOSIT ACCOUNT

The amount in possession of the Deposit Department of the Treasury in the year 1926-27 was as follows (in unit of ¥1,000):—

	Bro't over	Received	Paid	Balanced
Postal deposit	1,158,983	280,501	223,832	1,215,651
Ordinary deposits	338,454	676,356	672,602	342,212
Total	1,497,437	956,857	896,434	1,557,863

In view of the criticism and censure often directed to the Deposit Section as to the employment of its funds, the Government effected its reorganization in 1925, making it a separate department under control of the Finance Minister. At the same time new regulation for the employment of its funds was promulgated.

The amount of fund held by the deposit department at the end of July '28 is returned as ¥2,403,177,000, the detailed figures classified by kind being as follows:—

Kinds	Amount
Postal savings bank deposit.....	¥1,770,766,000
Rehabilitation & Savings debenture proceeds ..	81,803,000
Special accounts & other deposits.....	294,208,000
Deposit Dept. reserves.....	236,227,000
Revenue accruing from invested funds.....	30,169,000
Total	2,403,177,000

The respective figures of funds invested in various undertakings or used otherwise are tabulated as follows:—

Invested for	Amount
National loan bonds.....	¥ 493,848,000
Local loan bonds.....	357,313,000
Hypothec debentures	310,421,000
Industrial debentures	50,237,000
Other loan bonds	208,185,000
Chinese Govt. loan bonds.....	11,066,000
4½ Chinese Govt. loan bonds.....	25,022,000
British Exchequer notes.....	12,082,000
U.S. Treasury notes.....	24,771,000
U.S. Liberty loan bonds.....	2,026,000
Other loans	495,544,000
Deposit abroad	78,980,000
Deposit at home.....	258,910,000
Deposit Dept. outlay.....	74,769,000
Total	2,403,177,000

Of the above investment, ¥342,126,000 invested in the following enterprises in the shape of loans is regarded as "bad" loans:—

Loan to Bank of Chosen.....	¥ 56,000,000
Loan to Nichiro Fishery Co.....	6,000,000
Loan to Bank of Taiwan.....	50,000,000
Loan to Hanyehping Iron Works.....	42,500,000
Loan to Kokusai Kisen Kaisha.....	29,200,000
Loan to Kiangsi Railway Co.....	7,500,000
Loan to Oriental Development Co.....	42,988,000
Total incl. others.....	342,126,000

STATISTICS ON NATIONAL WEALTH

The latest data elaborated by the Bureau of Statistics put the total amount of Japan's national wealth at the end of 1924 at ¥102,343,490,000 or ¥1,731 per capita. The comparison with similar figures for 1913 (before the War) and 1919 (after the War) is shown below:—

End of	Total (in 1,000)	Per capita	Increase	
			Total (in 1,000)	Per capita
1913	¥ 32,043,130	¥ 606	—	—
1917	45,696,290	815	¥13,653,160	209
1919	86,077,070	1,530	40,380,780	715
1924	102,343,490	1,731	16,266,420	201

Principal items of the 1924 figures are as follows:—

Lands	33,247,340,000
Mines	3,523,230,000
Seas, lakes, rivers & harbors.....	5,158,600,000
Buildings	16,327,210,000
Machinery for manufacturing industries....	1,967,200,000
Agricultural products	3,130,420,000
Gold & silver (coins & bullion).....	1,823,820,000
Forestry products (trees)	1,747,670,000
Houses, furnitures & household effects....	9,684,010,000
Railways & tramways.....	3,544,210,000
Manufactures	2,311,160,000
Property of Govt. departments.....	6,483,880,000

STATE MONOPOLIES AND UNDERTAKINGS

From consideration of administrative expedient, or of furnishing model of new industry, or both combined, the Government is running no small number of undertakings. The list made a sudden increase after the Japan-China war for revenue purpose. It is true the Steel Foundry that was established in the years 1895-7 was not created from financial motives but from that of enabling Japan to become self-dependent as to supply of steel. The Tobacco Monopoly put into force from January, 1898, was the first undertaking actuated by revenue consideration. In the same year Camphor Monopoly was adopted, primarily for protecting the industry in Formosa. After the Russo-Japanese war the first revenue undertaking adopted was the expansion of the Tobacco Monopoly Law, making the monopoly complete so as to cover the manufacture, first of cigarettes and cigars from July 1908, and next of cut tobacco from April the following year. The Salt Monopoly was put into practice from June, 1905. These monopolies of tobacco, salt and camphor are under the control of a Bureau of the Treasury. The purchase or nationalization of 37 principal private railways between July, 1906 and October, 1907, was an event of far reaching consequence financially.

The following figures show the amount of production and value in Japan proper of the three monopoly articles (Kwan=3.75 kilog.)

TOBACCO

Yield of Leaf

	Area of plantation "cho"	New leaf		Old leaf		Total	
		kwan 1,000	Yen 1,000	kwan 1,000	Yen 1,000	kwan 1,000	Yen 1,000
1923-24 ...	39,388	16,104	42,978	360	824	16,464	43,802
1924-25	38,674	16,760	42,131	243	492	17,013	42,623
1925-26 ...	37,314	17,036	48,434	312	529	17,348	48,963
1926-27 ...	36,826	16,544	50,088	207	489	16,751	50,577
1927-28 ...	37,238	17,805	50,716	378	813	18,183	51,529

Manufacture

	Cigarettes (1,000)	Cigars (1,000)	Cut tobacco (Kg.)
1921-22	23,260,987	3,075	28,006,613
1922-23	25,928,511	824	26,279,775
1923-24	26,940,847	1,213	23,305,590
1924-25	29,303,016	2,502	24,171,491
1925-26	28,332,051	2,426	23,623,687

Foreign tobacco bought makes this record in ¥1,000:—

Foreign leaf tobacco bought	1924-25	1925-26	1926-27
American	6,699	6,071	7,697
Turkish	92	7	5
Manila	565	265	513
Indian	—	230	313
Burmese	69	104	—
Chinese	888	621	968
Total incl. others.....	8,850	7,871	7,507

Foreign manufactured tobacco bought	1924-25	1925-26	1926-27
Cigarettes	3,477	1,036	1,006
Cigars	74	66	41
Cut	76	85	57
Total incl. others.....	3,628	1,187	1,104

Salt

	Area of salt fields (cho)	Production 1,000 kin	Value Yen 1,000
1922-23	5,865	1,108,492	35,374
1923-24	5,837	799,846	25,524
1924-25	9,823	1,061,950	32,524
1925-26	5,843	1,135,517	34,608
1926-27	5,953	1,015,769	30,330
1927-28	5,776	1,027,051	31,183

The purchasing prices of salt are fixed and notified every December for operation in the following year. Salt for purchase is graded into five classes according to the percentage of sodium chloride contained, that is to say:—

1st class containing 90% or over	4th class containing 75% or over
2nd " " 85% " "	5th " " 70% " "
3rd " " 80% " "	

Tobaccos, Cigars & Cigarettes

HOME-MADE :

The following are carefully made by us from the best Havana, Manila, Sumatra, or Turkish leaf, and are excellent in quality and moderate in price :

CIGARS

IMPERIALES	25's	¥12.50	ORIENTALES	25's	¥ 5.00
"	5's	2.50	"	5's	1.00
PERFECTOS	25's	7.50	"	50's	10.00
"	5's	1.50	LONDRES	25's	2.50
REGALIA	25's	6.00	"	5's	.50
"	5's	1.20			
PRINCESAS	25's	6.00	SEÑORITAS	200's	10.00
"	5's	1.20	"	10's	.50

CIGARETTES

NILE (silver tipped)	10's	¥0.45	ORIENT (cork tipped)	10's	¥0.30
ALMA (gold ,,)	10's	.0.40	SALON	50's	1.50

FOREIGN-MADE:

The Imperial Japanese Government Monopoly Bureau aims to keep in stock, besides its own products, every description of manufactured tobaccos of the world, so as to enable visitors to Japan to obtain them at any of the chief retail-shops throughout the Empire.

CIGARS

Havana :—Punch, Partagas, Behrens, Diaz Havana Co., La Corona, Jose Gener, Belinda, Upmann. **Manila** :—Compania General, Oriente, Insular, Alhambra, Germinal, La Yebana, Maria Cristina, Delicias. **Germany** :—Friedrich Gustus, F. Kratz, Roelecke and Fritzberg, Klein Butsche. **Holland** :—Eugene Goulmy and Baar, Van der Putt, Dresselhuys. **Belgium** :—Ernest Tinchant, Prior.

CIGARETTES

Egypt and Greece :—Kyriazi, Simon Arzt, Dimitrino, Maspero, Melachrino, Nestor Gianacelis Matossian, Stefanou, Carathanassis, &c. **England** :—Wills, Westminster, Hill, Abdulla, Archer, Ardath, Alexander Boguslavsky, Teofani, Carreras, United Services. **Malta** :—Cousis, Atlam, Enchanteresse. **Turkey** :—Tobacco Regie. **Canada** :—W. C. Macdonald. **U. S. A.** :—Tobacco Products, American Tobacco Co., Liggett and Meyers, Schinasi Bros., Reynolds, &c. **Russia** :—Tobacco Trust Eltet. **Germany** :—Laferme, Kosmos, A. M. Eckstein, Constantin, Reemtsma. **Italy** :—Tobacco Monopoly Bureau. **Belgium** :—Van der Elst. **Holland** :—Anglo-American Cigarette Co. **Switzerland** :—Sato. **Manila** :—Alhambra, Manila Commercial.

PIPE MIXTURES

England :—Gallaher, Walkers, Archer, Carreras, Wills, Hill, Alfred Dunhill, Teofani. **Canada** :—W.C. Macdonald, Tucketts. **U.S.A.** :—Patterson, Blackwell, British American Tobacco Co., American Tobacco Co., etc. **France** :—Tobacco Regie, Peyrano.

PLUGS

U.S.A. :—British American Tobacco Co.

Price List can be had on application to the local Monopoly Office.

I. J. G. MONOPOLY BUREAU

Formosa Oolong Tea

1. Oolong Tea, on account of its high flavor and delicious taste, has long been valued amongst the English and American consumers, and is one of the staple exports of Formosa.
2. Oolong Tea, being free from any stimulant matters, is not injurious to sleeping.
3. Oolong Tea can be had at all grocers and tea dealers.

EXPORTERS

In TAIHOKU, Formosa

Boyd & Co.	Mitsui & Co., Ltd.
Oliver Carter Macy, Inc.	Nozawa & Co.
Jardine Matheson & Co., Ltd.	Tait & Co., Ltd.
Anglo-American Direct Tea Trading Co.	

SERVED AND SOLD AT

The Formosa Oolong Tea Saloon in MITSUKOSHI - Tokyo
 The Formosa Oolong Tea Saloon in MITSUKOSHI - Osaka
 The Formosa Oolong Tea Saloon - - - - Ginza, Tokyo
 The Formosa Oolong Tea Saloon - - - Dogenzaka, Tokyo
 ITOH DEPARTMENT STORE - - - - - Nagoya
 MATSUSHITA & CO., LTD. - - - - - Osaka

In delivering the purchased salt for sale to licensed agents the Monopoly Bureau adds to the price paid to the manufacturers or licensed importers a surcharge not exceeding ¥2.50 per "koku" or ¥1.48 per 100 "kin" according to the grade.

CAMPHOR

The acreage of camphor plantations and manufacture of crude camphor and oil show the following figures for the last few years:—

	Plantations (cho)			No. of refineries	Manufacture (1000 kin)	
	State	Public	Private		Crude camphor	Camphor oil
1921-22	103	117	98	2,859	2,056	2,126
1922-23	38	114	148	2,396	1,413	1,096
1923-24	20	69	45	2,282	1,252	1,267
1924-25	45	23	61	2,399	1,437	2,508
1925-26	485	73	189	2,264	3,560	3,405
1926-27	578	94	373	2,236	3,133	2,802
1927-28	—	—	—	2,180	1,216	2,115

The output of refined camphor in recent years is as follows:

	No. of refineries	No. of pans	Manufacture	
			Quantity (kin)	Value (Yen)
1921-22	1	174	1,447,006	3,510,755
1922-23	3	296	2,532,599	4,982,575
1923-24	3	296	3,068,212	6,136,426
1924-25	3	296	2,325,498	4,619,609
1925-26	3	296	2,623,140	5,259,332
1926-27	3	296	2,370,833	4,148,958

Sale of Manufactures

	Camphor oil		Camphor		Total value Yen 1,000
	Kin 1,000	Yen 1,000	Kin 1,000	Yen 1,000	
1923-24	1,111	661	2,501	4,055	4,716
1924-25	1,283	787	1,867	3,088	3,875
1925-26	2,504	1,594	2,306	3,812	5,407
1926-27	2,862	1,756	2,950	3,901	5,658
1927-28	2,165	1,008	2,700	2,617	3,625

TAXATION

History of Taxation

The decades following the Sino-Japanese war of 1894-95 and the Russo-Japanese war of 1904-05 were eventful as regards the financial devices for raising increased revenue necessary to meet the larger State outlay incidental to the heightened prestige of the country. Prior to the former foreign trouble the taxation system of Japan was very simple and its main resources consisted of only three taxes, i.e. taxes on land, income and the national liquor "saké". The outstanding features in the revised taxation measures enacted during the last thirty years were the

perceptible lightening of the land tax, repeated raising of levy on "saké" and other luxuries. The national liquor has always been the most favourite resource tapped by the successive Ministers of Finance whenever they were obliged to devise additional revenue program. It is significant to note that it was exploited during that period no less than seven times, the last in 1926.

The general reform plan enforced in March 1926 is far more radical in nature and thorough in scope than any attempt made by the preceding administrations in a similar direction. It was intended to secure a fairer distribution of public burden upon the tax-payers and general people. The exclusion of cotton fabric from the textile excise, abolition of transit and soy taxes and patent medicine stamp duty, and the elevation of untaxable limit for income and succession taxes, and lastly the adoption of untaxable limit for land tax are believed to have favourable effect on the middle and lower classes. Then the business tax was also abolished while the business profit tax and the interest on capital tax were newly created. Other increased revenue measures carried into effect at the same time were elevated rate on "saké" tax and succession tax, and the creation of tax on aerated drinks.

The Treasury's balance sheet due to the reform taxation is tabulated below in ¥1,000:—

Loss		Gain	
Income tax	10,210	Succession tax	6,200
Land tax	21,700	Saké tax	38,800
Cotton textiles excise ..	25,300	Playing card tax.....	500
Business tax abolished & Business profit tax created, balance loss.	4,100	Tobacco monopoly	22,200
Travelling tax	11,600	Interest on capital tax.	14,800
Soy tax	7,100	Aerated drinks tax	4,300
Patent medicine stamp duty	10,100	Total gain	82,000
Total loss	-90,300	Adverse balance	8,300

The loss of ¥8,300,000 to the Treasury from the above reform is, however, only apparent, for simultaneously the Government effected thorough recasting of the Customs Tariff practically left standing since 1910, from which ¥19,300,000 more was expected to accrue to the national coffer in ordinary years.

The second taxation reform, which was approved by the 52nd session of the Diet and enforced in April '27, aimed at the adjustment of the registration fees, stamp duty and sugar excise, and it was expected that this would result in a decrease of ¥6,450,049 in the State revenue in 1927 and ¥7,842,787 in the ensuing fiscal year. On the other hand an increase of ¥2,483,851 was expected for the two years in the customs revenue through the increase of import duty on sugar, so that the decrease on this account makes ¥4,056,188 and ¥5,358,936 respectively for the two years. Further details are given below:—

Decrease	1927-28	1928-29
Sugar excise	¥2,836,172	¥4,138,920
Registration fees	2,233,264	2,233,264
Stamp duty	1,470,603	1,470,603
Total	6,540,039	7,842,787

Increase

Customs revenue	2,483,851	2,483,851
Balance (—)	4,056,188	5,358,936

National and Local Taxes.—Japan follows the French method in chiefly relying on sur-taxes as ways and means in raising revenue for prefectural and municipal and corporation treasuries. In the prefectural treasury the yield from sur-taxes supplies about 52% of the total revenue, and that from independent imposts the remaining 48%, while in the municipal treasury the corresponding figures are 70 and 30% respectively. The sur-taxes supply as much as 97 to 98% of the total revenue for the village treasury.

1. Land Tax

Dwelling land, % of registered value.....	2.5/100
Cultivated " " " " " "	4.5/100
Other land	5.5/100
Hokkaido Cultivated land	3.2/100
Other land (ex. dwelling land)	4.0/100

Cultivated land valued at less than ¥200, not tenanted but situated in the same city, town or village where the owner lives, or in the neighbourhood, is exempted from imposition.

2. Income Tax

(As revised in 1926 and enforced from April of the year)
1st kind, (Incomes of juridical persons)

A. Ordinary incomes

Incomes of juridical persons having their head offices within Japanese Empire	5/100
Incomes of foreign juridical persons derived within Japanese Empire	10/100

B. Excess incomes

Part of ordinary incomes exceeding 10% of the capital p.u.	4/100
Part of ordinary incomes exceeding 20% of the capital p.u.	10/100
Part of ordinary incomes exceeding 30% of the capital p.u.	20/100

C. Liquidation incomes

Reserves, or incomes not levied income tax..	5/100
Other incomes	10/100

2nd kind, (Interests, dividends & bonus

A.—Interest on public bonds (except National bonds)	4/100
" " debentures and fixed bank deposits	5/100

B.—Dividends or bonus received.....7.5/100

3rd kind, (Incomes of individuals other than 2nd kind).

Under ¥ 1,200	0.8/100	Under ¥ 50,000	15/100
" 1,500	2/100	" 70,000	17/100
" 2,000	3/100	" 100,000	19/100
" 3,000	4/100	" 200,000	21/100
" 5,000	5/100	" 500,000	23/100
" 7,000	6.5/100	" 1,000,000	25/100
" 10,000	8/100	" 2,000,000	27/100
" 15,000	9.5/100	" 3,000,000	30/100
" 20,000	11/100	" 4,000,000	33/100
" 30,000	13/100	Over 4,000,000	36/100

3. Tax on Interest on Capital

Interest on capital liable to this tax is divided into two kinds, the rate to be 2/100 for both:—

- A. Interest on public bonds, debentures, industrial debentures, or bank deposits, and profit from trust loans.
- B. Part of the 3rd kind income consisting of interest on loans or deposits not made as business.

The interest paid to those not liable to the income tax of the 2nd kind, or the interest on savings debentures or "Reconstruction" savings debentures is exempted.

4. Business Profit Tax

Juridical persons or individuals engaged in business aiming at profit are taxed at the following rates:—

Juridical persons having their head or branch offices and other places of business within Japanese Empire 3.6/100 of net profit.

Individuals having their places of business within Japanese Empire..... 2.8/100 of net profit.

For individuals net profit under ¥400 is exempted from imposition. Sale of stamps issued by the Government, manufacture, repair or sale of weights and measures, publication under the Press Law, business conducted outside the Japanese Empire, etc. are not liable to this tax.

5. Registration Fees

For purpose of taxation registrable objects are classified into sixteen different groups each subdivided into as many items; (22 for immovables), the rate being based on value. A few examples of general interest are given here.

Acquisition by inheritance, etc.....	5/1,000-45/1,000
Provisional distraint, disposal by auction, etc.....	4/1,000-55/1,000
Reg'n of immovable, alteration, etc. (per item).....	¥ 0.20
Establishment of branch office.....	¥20.00
Removal of main office or branch (per item).....	¥10.00
Reg'n of house-name, appointment of director, etc.....	¥10.00

6. Tax on Sake and Other Liquors

A. Tax on "Saké"

The tax on "saké" is assessed by "koku," (ab. 40 imp. gal.) as follows:—

1. "Dakushu" containing not more than 23° of alcohol ¥36 per "koku"
 2. { "Seishu" and "shirozake" containing not more than 23° of alcohol..... } ¥40 per "koku"
 { "Mirin" and "Shochu" containing not more than 30° of alcohol... }
 3. "Shochu" containing more than 30° and not more than 45° of alcohol.... { ¥1.50 per "koku" for each additional 1° over the rate for the 2nd kind, i.e., ¥40 }
 4. { "Seishu," "dakushu" and "shirozake" containing more than 23° of alcohol } ¥1.80 per "koku"
 { "Mirin" containing more than 30° of alcohol } for each 1° of
 { "Shochu" " " " 45° " " } alcohol.
- "Shirozake"—white saké. "Dakushu"—unrefined saké.
 N. B.—"Seishu"—refined saké. "Mirin"—sweet saké.
 "Shochu"—distilled saké.

B. Tax on Beer

This is levied upon brewers of beer at the rate of 25 yen per "koku" of the quantity brewed.

C. Tax on Alcohol and Alcoholic Liquors

Except those subject to "saké" or beer tax, alcohol and alcoholic liquors are taxed at the rate of ¥1.80 for each percent of pure alcohol contained in 1 "koku" of the original fluid. In no case, however, shall the rate of the tax be less than ¥42 per "koku."

No tax is levied upon wine or other alcoholic liquors made from fruits of all kinds.

7. Tax on Aerated Drinks

Aerated drinks, bottled, containing carbonic acid of more than 5/10,000 of the whole weight and alcohol of less than 1/100 of the whole bulk are taxed ¥7 to ¥10 per 1 "koku"; those not bottled ¥3 per 1 kg. of carbonic acid used.

8. Tax on Convertible Notes

The Bank of Japan, the Bank of Formosa, the Bank of Chosen and the Yokohama Specie Bank enjoy the privilege of issuing notes, but the first alone is at present amenable to the tax which is 12½/1,000 per annum per average monthly issue.

9. Sugar Excise

	Per picul Yen
Class 1. Under No. 11. Dutch standard	2.00-2.50
Class 2. " No. 18. "	5.35
Class 3. " No. 22. "	7.35
Class 4. Above No. 22. "	8.35
Class 5. Sugar, candy, lump-sugar, etc.....	10.00
Molasses	1.00-3.00
Syrup	7.35

10. Excise on Woolen and Silk Textile or Mixture

Silk or silk mixtures	} 10/100 of the value
Woolen or woolen mixtures	

11. Succession and Inheritance Taxes

First put into force in 1905 and revised thrice, the rate has three grades for both, corresponding to three kinds of the relation of successors or inheritors to the deceased family chiefs or testators. The assessment begins when the estate succeeded to is estimated at ¥5,000 or over, or when the property bequeathed is 1,000 or over.

Value of Estate	1st grade (per 1000)	2nd grade (,,)	3rd grade (,,)
Under ¥5,000	5	6	8
Over 5,000	6	7	10
" 10,000	7	8	15

Value of Estate	1st grade (per 1000)	2nd grade (,,)	3rd grade (,,)
" 30,000	10	15	25
" 50,000	20	25	40
" 100,000	30	40	60
" 300,000	60	70	90
" 500,000	80	90	110
" 1,000,000	100	110	130
" 5,000,000	130	140	160

N.B.—1st grade, when the heir is a direct descendant of the previous family head; 2nd grade, when in the absence of legitimate or presumptive heirs or of parents, the heir is selected by the family conference; 3rd grade, when the heir is selected from among scions of the previous head as a result of the family conference.

Value of bequeathment	1st grade (per 1000)	2nd grade (per 1,000)	3rd grade (per 1,000)
Over ¥1,000	72	14	20
" 10,000	17	20	25
" 50,000	45	55	75
" 100,000	65	75	95
" 300,000	95	105	125
" 500,000	115	125	145
" 1,000,000	135	145	165
" 5,000,000	180	190	210

N.B.—1st grade, when the beneficiary is a direct descendant of the testator; 2nd, when the beneficiary is consort or parent; 3rd, other cases.

STATISTICS OF TAXATION

Land Tax

Jan. 1st 1927	Area (1,000 chō)	Registered value (Yen 1,000)	Tax (Yen 1,000)
Dwelling land	415*	703,466	17,586
Paddies	2,971	1,015,791	45,683
Upland fields	2,784	231,273	10,223
Forests	8,532	27,264	1,476
Plains	1,578	4,026	162
Total incl. others....	16,456	1,986	75,342

*=1,245,000,000 "tsubo"=1,017,016 acres.

Income Tax

Year ended March	Payers	Income (Yen 1,000)	Tax (Yen 1,000)
1926 {	1st kind	25,098	1,168,238
	2nd kind	—	565,596
	3rd kind	1,898,621	3,150,683
	Total	1,923,719	4,884,517
1927 {	1st kind	24,788	1,128,639
	2nd kind	—	622,246
	3rd kind	1,104	2,541,543
	Total	1,129	4,292,428

Business Profit Tax

March 31st.	Payers	Sale (Yen 1,000)	Capital (Yen 1,000)	Persons* engaged (1,000)	Tax (Yen 1,000)
1924	995,240	15,661,934	7,165,431	2,088 (1,642)	62,701
1925	1,033,059	15,440,923	7,643,138	2,113 (1,627)	63,646
1926	1,078,510	16,660,000	8,216,221	2,232 (1,690)	68,052
1927	1,078,777	16,745,750	8,655,301	2,267 (1,723)	64,335

N.B.—* Figures within parentheses show the number of laborers employed.

Other Taxes

Taxes	Year ended March		
	1925 (Yen 1,000)	1927 (Yen 1,000)	1928 (Yen 1,000)
Succession tax	21,456	18,458	15,509
Travelling tax	—	—	970
Mining tax	5,381	5,130	4,758
Tax on convertibles notes.....	4,151	4,518	4,597
" " sake	238,415	238,681	207,262
" " beer	20,462	20,385	17,578
" " alcoholic liquors	1,979	2,186	1,832
" " soy	—	—	1,115
Excise on sugar	78,554	76,476	74,857
" " textiles	34,747	33,847	35,295
Bourse tax	14,860	14,954	12,653
Customs duty	141,069	127,413	105,381
Tonnage dues	1,539	1,431	1,330
Total	901,477	883,257	812,620

N.B.—Travelling tax and soy tax were abolished in 1926; textile excise is imposed on silk fabrics alone.

N.B.—The total includes land, income and business taxes.

Figures for '28 and '27 show budget estimates, those for '26 settled account.

Average Amount of Taxes per Capita

Year ended March	National tax	Prefectural tax	Communal tax	Total
1922	¥12.235 (6.277)	¥3.955	¥6.395	¥22.585
1923	13.572 (6.670)	4.182	6.848	24.602
1924	12.061 (5.160)	4.177	6.181	22.419
1925	12.938 (5.242)	4.225	6.337	23.500
1926	13.245 (6.489)	4.243	6.337	23.825

N.B.—Parenthesized figures show the direct national taxes, i.e. land, income, capital interest, business profit, mining, and bourse taxes.

Arrears in National and Local Taxes

Year ended March	No. of defaulters	Amount	Loss to Treasury
National...	1923	311,944	27,660,008
	1924	413,986	31,549,161
	1925	562,159	33,888,126
	1926	593,243	40,709,175
Local.....	1921	2,895,772	11,427,196
	1922	3,162,181	13,915,215
	1923	3,753,492	16,071,720
	1924	4,311,020	16,853,057

The national taxes covered by the figures consist of land, income, business profit, capital interest, "saké," and other taxes.

Arrears are subject to payment of interest, as provided for in the Collection Law, as follows: "Tax-payers who fail to meet their demand notes when the tax falls due shall pay 3 sen per day on every ¥100 of the amount of tax owing."

INTERNATIONAL WARS AND INDEMNITY

Japan has been fortunate enough to stand on creditor's side in the financial relations consequential to the international wars she was involved beginning with the Japan-China war of 1894-5. The indemnities or compensation accruing to her as victor makes the following list:—

	(Yen 1,000)
Indemnity, Japan-China war.....	311,073
Compensation for Liaotung Peninsula retroceded	44,907
Occupation expense of Weihaiwei refunded.....	20,380
Indemnity, Boxer affair	35,807
Prisoners' expense, Russo-Japanese war, refunded	40,451
Japan's share in European war indemnity.....	400,000

As regards the last item 12,784,757.21 gold marks have been settled in the shape of ships and dye-stuffs received while as price appraised for the Shantung railway and mines 59,000,000 gold marks have also been credited to Germany.

NATIONAL DEBTS

The first loan raised by Japan was ¥500,000 silver borrowed in 1868 from the British Oriental Bank, though this was a temporary affair and hardly to be called a loan in the usual sense. The first "bona fide" loan, also foreign, was the issue in London in 1870 of 9% bonds amounting to ¥4,890,000 chiefly as a fund for laying the Tokyo-Yokohama railway. In 1873 another foreign loan, 7% interest, was incurred to the extent of ¥11,712,000. All these were repaid long ago. The first regular domestic loan amounting to ¥23,309,000 was raised to meet the debts incurred by the various feudal governments and which devolved on the Imperial Government. The capitalization of hereditary pensions in 1874 and 1876 of "daimyōs" and their retainers, and those of Shinto priests in 1877 swelled the State debts to over ¥230,000,000 by 1877.

**National Debts, Raised, Redeemed, Outstanding and
Interest thereon; Ratio per Capita**

Year ended March	Amount issued Yen 1,000	Amount redeemed Yen 1,000	Outstanding March Yen 1,000	Interest thereon Yen 1,000	Debt per capita
1922	415,558	115,729	3,543,871	166,227	61.187
1923	508,390	243,500	3,808,661	179,474	64.887
1924	759,623	370,688	4,197,590	203,436	70.595
1925	718,579	586,429	4,329,733	214,147	70.884
1926	600,693	464,530	4,999,176	245,453	81.842
1927	537,589	364,997	5,171,766	244,154	81.482
1928	—	—	5,397,866	267,494	88.032

National Loans Outstanding

Domestic Loans (June 30th, 1928)

	Years of issue	Redeemable by (in)	Amount of issue (Yen)	Amount outstanding (Yen)
5% Loans	1906-26	1980	1,168,968,700	1,044,368,600
Loans for Rly. Nationalization (5%)	1908-09	1963	476,318,000	419,427,000
Extra. Military Expenditure Loan (5%)	1906	1935	310,407,000	120,825,000
5% Loan (Onshi)	1910-13	1967	30,000,000	22,218,100
4% Loan (1st issue)	1910-12	1969	176,220,000	170,114,000
4% Loan (2nd issue)	1910-12	1969	99,999,000	96,028,000
5% Exchequer Bonds	1916-28	1934	2,231,320,000	2,202,150,300
Railway Notes (5%)	1916-17	1932	80,000,000	79,999,000
Total	—	—	4,543,285,700	4,132,914,000

The total excludes the Extraordinary Exchequer Notes amounting to ¥159,171,250 and Rice Purchase Bills to ¥56,683,600 at the same date.

Foreign Loans (June 30th, 1928)

	Years of issue	Redeemable by (in)	Amount of issue	Amount outstanding
1st 4% Sterling Loan....	1899	1953	¥ 97,630,000	¥ 91,338,000
2nd 4% Sterling Loan....	1899	1931	244,075,000	230,515,000
3rd 4% Sterling Loan....	1910	1970	107,393,000	105,429,000
5% Sterling Loan.....	1907	1947	224,549,000	222,674,000
6% Sterling Loan	1924	1959	244,075,000	244,075,000
4% Emprunt de 1910.....	1910	1970	174,150,000	169,503,000
6½% Gold Bonds.....	1924	1954	300,900,000	272,537,000
Sterling debentures of				
S. M. Rly. (5%, 4½%)...	1907-11	1936	117,156,000	117,156,000
Total			1,509,928,000	1,453,230,000
Grand total			6,053,163,000	5,586,144,000

Prospective Loans

The contemplated Government loans in the budget for 1928-29 are as follows:—

General account	¥(1,000)
Reconstruction	64,000
Special account	
Railways	51,560
Korean undertakings	19,000
Formosan "	5,000
Kwantung "	1,000
Saghalien "	2,000
Total	78,560
Grand total	142,560

These are not to be issued on the open market, but are partly to be met with the Deposit Department money and the funds for petty insurance, health insurance and cultural undertakings in China, and partly to be issued through the Post Office.

Besides the above the loan scheme for the fiscal year includes the following loan bonds to be granted and exchequer bonds or notes to be renewed:—

Loans to be granted	(¥1,000)
Adjustment of Earthquake Notes.....	230,000
Purchase of private local railways.....	50,000
Total	280,000

Japanese Investment in China (in ¥1,000)

The following figures were for the first time elaborated in 1927 by authoritative quarters after prolonged inquiry.

Grand total	¥2,533,470	Manufacture	74,626
Loans	700,000	Trade	115,854
General investment. 1,833,470		Transportation ..	330,770
In Manchuria	1,323,550	Japan's share in	
Farming	19,289	Japanese-Chinese	
Fishery	1,396	joint undertak-	
Mining	8,324	ings	34,000

Investments by Japanese capitalists	30,000	Spinning & allied business	5,800
Loans by Japanese banks and the Toyo Takushoku Co.	327,964	Shipping & allied business	6,660
Loans by Japanese money-lenders .	34,593	Manufacture	21,300
Debentures	200,000	Investments in real estate	12,950
Value of Gov. property, etc.	146,634	In Tsingtao	88,000
In Shanghai	315,600	Spinning & allied business	43,000
Spinning & allied business	178,200	Manufacture	15,000
Shipping & allied business	50,000	Investments in real estate	30,000
Manufacture	66,600	In Tientsin	34,600
Investments in real estate	20,800	Spinning & allied business	5,850
In Hankow	56,710	Manufacture	4,700
		Investments in real estate	24,050
		In Kiukiang & other places	25,000

SPECIE HOARDED ABROAD

The specie kept abroad by Japan with the object of paying interest on the foreign loans demanded before the World's war the gravest attention of our financial authorities who devised all possible means to keep the amount from decreasing. The Treasury was plunged into keen anxiety when its specie reserve fell to ¥341 millions at the end of 1914 from ¥371 millions a year before. But soon this harassing care began to lessen with the arrival of large orders for munitions and other commodities and the growing balance of trade in favor of exports. After that the amount steadily went on increasing, the high watermark being reached by the end of 1920 followed by the marked advance of prices. Next came a reaction. The balance of trade has turned decidedly adverse since January 1920, thereby causing a diminution of the amount, as shown below:—

(Yen 1,000,000)	Total amount	Share of Treasury	Share of Bank of Japan	Held at home	Held abroad
June of 1925.....	1,460	388	1,072	1,175	285
End of 1925.....	1,413	343	1,070	1,155	258
June of 1926.....	1,365	293	1,072	1,143	222
End of 1926.....	1,357	283	1,074	1,127	230
June of 1927.....	1,365	293	1,072	1,143	222
End of 1927.....	1,273	192	1,081	1,087	186
June of 1928.....	1,261	178	1,083	1,086	175

FINANCE OF HOKKAIDO, PREFECTURES & CIVIC CORPORATIONS (In ¥1,000)

Fiscal year	Hok. & Pref.		Cities		Towns & villages		Total	
	Revenue	Expenses	Rev.	Exp.	Rev.	Exp.	Rev.	Exp.
1922—23.....	468,056	374,082	517,165	387,573	508,479	455,399	1,493,701	1,217,054
1923—24.....	489,619	407,185	559,004	420,549	492,433	426,020	1,541,055	1,253,754
1924—25.....	486,790	414,661	622,175	452,154	504,625	439,286	1,613,590	1,306,100
1925—26.....	486,706	409,658	712,642	547,624	513,443	451,915	1,712,791	1,409,196
1926—27.....	379,173	379,129	676,169	671,908	442,825	442,921	1,398,168	1,493,958
1927—28.....	407,804	407,803	699,822	690,222	481,582	481,507	1,589,209	1,579,533

Note.—Figures for the last two years represent estimate account; those for the other years settled account.

Hokkaido and Prefectural Finance

The revenue of a prefecture consists of taxes and rates and grants from the Central Treasury, etc. The sur-tax is levied on the five national taxes, i.e. Land, Business profit, Income, Mining and Placer Mining, the normal rate of sur-tax as revised in 1920 being for dwelling land 34/100 of the national tax, 3.6/100 for income, 29 for business tax and so on. The rate may be more or less increased with the consent of the central authorities. The prefecture levies a rate on each household, and this is one of the most important items of prefectural finance. The business tax as imposed by the Prefectural Treasury is levied on those occupations that do not pay national tax, such as restaurants, public performances, ships, vehicles, etc., in all about 15. Of the grants from the National Treasury those on account of salaries and police expenses stand foremost. Treasury subventions are also made in connection with epidemics and leprosy, riverwork, industrial encouragement, etc. Repeated inundations have been a cause of heavy drain to both Prefectural and National Treasuries

Revenue Items (¥1,000)

	1924-25	1925-26	1926-27
Land tax rate.....	75,209	73,444	75,343
Business tax	8,482	8,982	9,115
" " rate	20,031	23,799	26,505
Income tax rate.....	5,012	5,273	5,792
House tax and Household rate...	56,519	53,017	57,938
Miscellaneous taxes	48,029	52,053	55,352
Receipts from Central Treasury	31,726	40,843	47,423
Loans	21,808	16,691	17,968
Brought from last account.....	6,288	6,658	8,650
Miscellaneous receipts	31,876	30,777	21,686
Total incl. others.....	335,003	341,599	379,173

Expenditure Items (¥1,000)

	1924-25	1925-26	1926-27
Council	1,714	1,683	1,864
Offices	5,191	6,043	6,923
Police	64,915	68,927	73,073
Public works	81,183	82,565	97,111
Education	83,743	82,858	95,742
Industry	36,029	36,294	39,316
Sanitation and hospitals.....	7,760	8,137	8,555
Social works	2,577	2,355	2,765
Loans	24,771	24,589	26,976
Miscellaneous	9,431	11,222	9,662
Total incl. others.....	334,995	341,972	379,130

Finance of Civic Corporations

The revenue of cities and rural corporations is derived from the rate charged to national or prefectural taxes and direct or indirect special taxes; and lastly national, prefectural and other subventions and miscellaneous receipts.

Revenue of Cities, Towns and Villages

Revenue consists of proceeds from permanent properties. The rents are derived from the loan of property to companies or individuals, the charges and fees are obtained from issue of certificates as to property qualification, etc., copying of official registers, etc., and the proceeds from communal undertakings as electric-trams, etc. Then there are taxes and rates, fees of common schools, grants from Central and Prefectural Treasuries, etc. Sur-taxes are imposed on four national taxes (Land, Income, Business Profit and Mining), and three prefectural taxes (Household rate, House-tax, etc.). The sur-tax on building land is 9/100 of the national tax, that on business and income 15/100 each. The household rate is not much different from poll-tax, being imposed on every member of the household. Cities, towns and villages have their own special taxes, as area-rate, land transfer other than that by inheritance, income not subject to the imposition of the national tax. Grants from the Central and Prefectural Treasuries are chiefly in consideration of the trouble and expense incidental to collecting their taxes.

Cities (¥1,000)

Revenue Items

	1924-25	1925-26	1926-27
Land tax rate.....	4,469	4,395	5,036
Income tax rate.....	9,671	11,945	14,124
Business profit tax rate.....	19,411	26,492	28,430
House tax rate.....	12,481	13,895	16,989
Sur-tax on household rate.....	8,586	9,057	9,787
Miscellaneous taxes	13,804	17,590	18,774
Rents and charges.....	130,639	145,820	153,904
Receipts from Central Treasury	42,494	48,408	47,235
Loans	170,628	185,865	215,457
Brought over from last account	37,905	45,918	43,764
Miscellaneous receipts	66,567	80,817	80,037
Total incl. others.....	552,293	627,098	676,169

Expenditure Items

Council	1,006	1,078	1,223
Offices	18,859	20,480	23,572
Education	75,366	81,761	85,244
Public works	70,595	76,814	79,582
Industry	16,115	19,281	23,140
Sanitary	68,820	73,684	82,911
Social works	8,162	10,212	10,036
Gas and electricity	122,995	115,763	135,735
City Planning	27,615	47,664	35,009
Police	1,448	1,626	1,916

	1924-25	1925-26	1926-27
Loans	95,497	125,914	152,914
Miscellaneous	26,042	19,642	20,804
Total incl. others.....	549,382	610,373	671,908

Towns and Villages (¥1,000)

Revenue Items

	1924-25	1925-26	1926-27
Land tax rate	39,202	38,976	39,338
Business tax rate.....	11,819	11,941	12,850
Income tax rate	8,351	7,993	8,344
House tax rate.....	8,202	7,415	8,538
Sur-tax on household rate.....	152,834	147,659	155,475
Miscellaneous taxes	27,439	28,788	31,752
Proceeds from property.....	16,475	17,173	18,239
Rents and charges.....	13,599	13,274	14,895
Receipts from Central Treasury	36,267	37,860	45,969
Loans	13,507	11,804	16,131
Brought over from last account	21,076	23,062	24,217
Miscellaneous receipts	22,770	22,003	27,360
Total incl. others.....	409,384	404,288	442,825

Expenditure Items

	1924-25	1925-26	1926-27
Council	3,353	3,278	3,479
Offices	73,268	73,000	77,135
Education	197,328	194,235	210,586
Public works	33,652	32,429	35,999
Industry	7,535	6,975	7,535
Sanitary	16,470	15,614	19,419
Social works	956	1,396	2,356
Gas and electricity.....	1,664	1,699	2,377
Police	6,082	6,454	7,450
Loans	14,514	14,349	17,217
Miscellaneous	25,702	25,421	28,555
Total incl. others.....	409,114	403,999	442,921

Local Loans

Local loans date from 1890 in which year the Local Government system was completed, and regular provisions relating to local loans were enacted for the first time.

The provisions state that the prefectural and communal corporations may raise loans for the purpose of redeeming older debts or, when the ordinary revenue is found inadequate, to meet extraordinary disbursements occasioned by natural calamities or similar occurrences of unavoidable nature or by undertakings judged to confer a permanent benefit on the corporations. In doing so, the approval of the legislative organ of the corporation concerned and the Ministers of Home Affairs and of Finance is of course required, though within a certain limitation this provision may be waived according to the Imperial Ordinance of 1912.

With the object of enabling communal bodies to obtain cheap

loans either to redeem high interest loans or to start useful undertakings, the Government, at the instance of the Diet, agreed in the year 1909, when a measure was adopted to encourage savings, to loan a portion of the postal savings deposits to the communal bodies, the loans being handled direct by the Hypothec Bank through the medium of the Provincial Hypothec Banks.

Local Loans Outstanding (¥1,000)

March 31st	Prefectures	Counties	Cities	Towns & Villages	Local associations	Total	Average per capita Yen
1923 ..	165,152	2,477	547,217	55,254	18,181	788,283	13.67
1924 ..	193,204	—	624,844	81,655	24,826	924,532	15.81
1925 ..	269,117	—	727,748	95,597	26,677	1,119,139	20.00
1926 ..	282,475	—	839,746	115,699	30,222	1,267,943	21.23
1927 ..	329,326	—	1,017,515	131,270	35,136	1,513,247	25.33

N.B.—Counties or “gun” as administrative organs were abolished in 1924. Hence no figure afterward.

Classification of Local Loans Outstanding (¥1,000)

March 31st	Education	Sanitary	Industry	Public works	Gas & elect. under'gs	Social works	Total incl. others
1923 ..	62,919	148,006	33,716	141,349	243,131	45,660	788,283
1924 ..	79,344	132,436	10,960	139,445	305,953	61,451	924,532
1925 ..	94,159	137,636	25,467	208,839	373,428	90,296	1,119,139
1926 ..	102,777	160,986	21,562	210,604	408,657	124,124	1,267,943
1927 ..	134,658	179,973	35,254	277,820	472,696	113,955	1,513,247

DEBENTURE LOANS

The amount of debenture loans of banks and other companies outstanding at the end of the past few years is as follows according to the returns compiled by the Industrial Bank of Japan (¥1,000):—

Banks

	1924	1925	1926	1927
Industrial Bank of Japan...	332,226	286,269	271,018	246,469
Hypothec Bank of Japan...	548,248	629,503	661,288	666,262
Savings debentures	10,201	5,803	1,053	—
Hokkaido Colonization Bank	107,156	106,474	98,649	115,935
Industrial Bank of Chosen..	118,800	135,976	144,837	173,445
Agr. and Ind. Banks.....	273,435	331,997	371,975	435,021
Reconstruction savings debentures	17,464	44,071	62,052	72,938
Total*	1,425,547	1,565,089	1,633,020	1,751,324

Companies

Railway and tramway.....	332,393	374,351	395,338	477,797
Shipping and shipbuilding..	101,550	126,800	125,350	141,350
Mining	32,240	40,590	46,990	47,860

	1924	1925	1926	1927
Electric and gas.....	430,704	621,287	717,063	801,263
Spinning and weaving.....	45,416	89,090	91,760	114,980
Sugar mfg. and brewing....	17,360	51,360	50,360	65,360
Paper mill	31,900	67,449	97,168	114,000
Cement and crockery.....	13,121	16,459	30,009	26,300
Chemical industry	23,244	28,645	39,395	52,693
Manufacturing	36,792	49,021	32,370	25,922
Others	223,148	233,752	222,650	237,709
Total	1,287,870	1,699,322	1,848,454	2,105,240
Grand Total	2,713,418	3,264,411	3,481,474	3,865,563

N.B.—* Includes the debenture loans of the Local Industrial and Agricultural banks annexed by the Hypothec Bank of Japan.

Amount Outstanding According to Rates

(End of June 1927, in ¥1,000)

	5% & below	5% & over	6% & over	7% & over
Banks	452,302	232,445	240,601	615,672
Companies	18,353	79,968	318,049	1,189,918
Total	470,655	312,413	558,650	1,805,590

	8% & over	9% & over	10% & over	Total
Banks	153,916	—	—	1,694,937
Companies	281,728	24,142	13,028	1,925,186
Total	435,644	24,142	13,028	3,620,123

Foreign Loans Floated by Private Companies

From the beginning of 1923, the year of the earthquake calamity, to June 1927 loans floated by private companies in England and America amounted to £7,900,000 and \$111,400,000 respectively, totalling ¥301,599,664 in Japanese money at normal value. When the Government foreign loans issued during the same period are added, it will aggregate ¥1,811,527,664.

Further details are given below:—

Companies	Amount (In 1,000)	Interest %
Oriental Development Co.....	\$19,900	6.0
Tokyo Electric Light Co.....	£ 3,000	6.0
" " " "	£ 600	6.0
" " " "	\$24,000	6.0
South Manchuria Railway Co.....	£ 4,000	5.0
Japan Industrial Bank.....	\$22,000	6.0
Daido Electric Power Co. (1st issue).....	\$15,000	7.0
" " " " (2nd issue).....	\$13,500	6.5
Uji-gawa Electric Power Co.....	\$14,000	7.0
Oriental Electric Power Co. (1st issue\$)....	\$15,000	7.0
" " " " (2nd issue)....	£ 300	5.0
" " " " (3rd issue)....	\$14,000	7.0

THE EMBARGO ON GOLD AND SILVER

The embargo on gold, silver and articles made of these precious metals was introduced in 1917 and still remains in force as regards the former metal. In view of the demands of certain business men that it should be repealed as a means of relieving the unfavorable exchange quotations and especially in consideration of the grave trouble experienced in settling payments for goods imported, the balance of trade having continued to be adverse to imports, the Minister of Finance issued a statement in Aug., 1924. It was worded as follows:—"The economic condition of the world has not yet settled down to stability, and that of Japan still remaining not sufficiently stable, the immediate removal of the embargo may have an adverse effect on the economic position of this country. The Imp. Govt. therefore do not think it proper to remove the embargo on gold at present.The financial conditions having undergone a great change recently, especially since the monetary panic of the spring of 1927, the present Minister of Finance, Mr. Mitsuchi feels called upon to postpone the removal of the embargo indefinitely, in concurrence with the views held on the subject by his predecessor Mr. Takahashi, who, when he was Finance Minister in the Hara Ministry several years ago, strongly opposed the lifting of the embargo on the ground that a world war was in danger of breaking out on the China problem. The situation in China has certainly grown worse since that time.

To improve the exchange market, shipments of gold to New York and London were made several times during 1925 and 1926 by the Treasury, but even this practice has been discontinued, and the exchange market is left to take its own course, with the result that, as shown elsewhere, the Yen market that had been rising almost to par, i.e. \$49,846, began to drop with the economic disturbance early in 1927, till in November it fell to the level of \$45.00.

In December 1925 the Government altered its policy as to silver and lifted the ban on the export of the metal, for, as it explained, the outflow of silver would no more affect the domestic market seriously in view of the gradual fall of the world's price due to dwindled demand for the metal after the Great War, while the discontinued use of home production for minting purposes made it advisable to permit export by way of protecting the Japanese producers of silver.

CHAPTER XXIX

AGRICULTURE

INTRODUCTORY REMARKS

Intensive Cultivation.—This is the most characteristic feature of Japanese agriculture, for while the area of Japan proper, 142,000 square miles, is less than 1/20th of that of the United States, it has to support a population of over 60 millions, or about one half the population of the U.S.A. Next, the Japanese farming families that number about 5½ millions cultivate roughly 6 million cho or 15 million acres, a little under 3 acres per family. For the population of Japan proper, therefore, one acre has to feed a little under four persons. Even in Hokkaido, the average area per family is only 7½ acres. It was only after Japan had acquired the island of Formosa and a part of Saghalien, and annexed Korea that she obtained an outlet for her large and growing population.

Cultivation is chiefly done by human labor, with rude and simple implements, though the farmer is sometimes helped by a horse or an ox but seldom by a team of animals, except in Hokkaido where American implements are used.

Rice and Farm Products.—Rice is par excellence the staple farm product of Japan, more than one half of the total area cultivated being under rice, that is in paddy fields, the rice cultivation in ordinary dry fields being insignificant. As a second crop barley, rape, beans and peas are grown. The principal crops in upland farms are wheat, barley, rye, buckwheat, sweet potatoes, etc. besides vegetables, fruits, etc. Oats, flax and grasses are new crops, onions, cabbage and asparagus are new vegetables, and apples, cherries and small fruits like strawberries are also new. Indigo and cotton have almost gone out of cultivation on account of foreign competition. Tobacco-growing is under strict supervision of the Government which conducts a tobacco monopoly.

Manuring.—There are three main points worth mention as regards the situation of manuring in Japan: first, that the bulk, something like 80 per cent., of the manures used consists of nitrogenous matters; secondly, that night-soil has been freely used at all places from time immemorial; and thirdly, that as regards money manures, as distinguished from those of self-supplied origin, Japan still depends to a large extent on foreign supplies, though the home-made superphosphate and sulphate of ammonia are steadily increasing in volume.

Land Holding.—It is to the lasting credit of Japan that the present system of private holding of land was effected amidst perfect peace in 1872 when the feudal system of government was replaced by the Imperial regime. Till then feudal lords and their

vassals nominally owned land in their respective fiefs. Only they let the land to farmers as their tenants. By that peaceful revolution the nobility and samurai lost their fiefs, while the tenants retained the lands they possessed. The government then instituted a new land survey by which the area of each holding was determined, and issued to each holder a title-deed. The value of the land was obtained by dividing the net yield of the land by the rate of interest. The net yield was to be understood as the residue of the whole of the product from which the cost of production and the amount of the taxes were to be subtracted. The former was fixed at 15% of the gross product, and the rate of interest was in most cases 6%. The national land tax was then fixed at 3%, and the local tax at 1% of the value of the land. This value of the land became the legal value, and in fact, the *Ertragswerth*. The land certificate has been abolished and the registration system has been adopted.

Agrarian Problems at Present.—Japan has no special legislation as to land holding such as the Agricultural Holding Act in England. In the civil code a long lease of farm land is defined as one extending over a period of from 20 to 50 years. Usually 10 or 12 years contract prevails, though tenancy with no agreement as to the term of years the lease is to run may be seen everywhere in the older rural districts. But the modern industrial tendency of the nation and the migration of rural population towards cities are causing greater difficulty for the landlords to find tenants, while their relation has become seriously embittered recently owing to the awakening of the peasant classes.

Agricultural Credit.—There are two kinds of agricultural credit, i.e. long credit and short credit, the former for the purchase of farm land and for the development of farm land and other permanent improvements for which a loan for a term of 50 years or less is allowed. The short term credit is one that is to be used mostly for the purchase of fertilizers, farm implements, or feed for cattle. Our banks usually give credit for a term of five years or less. There are also credit associations for supplementing these agricultural banks.

RECLAMATION WORKS

Statists say there is still in Japan exclusive of Korea and Formosa about 2,000,000 "cho" (about 5,000,000 acres) of land available for tillage and that of the total, about 1 million "cho" may theoretically be converted into rice paddies. The average yield per "cho" (2½ acres) being 17.4 "koku" (1 "koku"=4.96 bushels), the reclamation of so much area will mean addition of 35,000,000 "koku," or about 50% to the annual yield at present. The Government decided in 1919 to reclaim 250,000 "cho" of waste land in 9 years beginning with '19. About 40% of the expenditure will, according to the regulations, be granted to those who undertake the reclamation of an area of over 5 "cho." By the end of 1921 utilization projects covering roughly 217,000 "cho" were approved of which 151,134 "cho" had either been started or completed. (Refer to the Chapter on Food-Supply in the Supplement, 1928.—Ed.)

Adjustment of Farms

To increase productive power by drainage, to lessen unproductive area in the shape of boundary ridges, and finally to obviate the disadvantage incidental to scattered existence of small plots of farms belonging to the same owners, the authorities have been encouraging, by offering special privileges as to tax, loan, etc., since 1900 the work of adjustment of farms. The adjustment aims to increase the average to at least 1 "tan" or 4 at the largest for the paddies. The official calculation is that the adjustment will increase the yield by 15%. Then the unproductive areas utilized are expected to amount to 3% of the area adjusted.

By the end of 1926 the area adjusted aggregated 782,554 "cho" involving an expense of about ¥345,945,000. The average cost of farms adjusted was ¥23.1, the highest being ¥113.4 for Nagano and the lowest ¥12.3 for Miyagi.

FUNDAMENTAL STATISTICS ON TILLAGE LAND, ETC.

Areas of Utilized Land

Areas of utilization land of various descriptions are shown below, figures in cho (2.45 acres) being in 1,000:—

Year	Gross area	Under tillage	% to gross area	Pastures, etc.	%	Forests	%	Sundries	%
1918	38,863	6,090	15.7	3,554	9.1	18,783	48.3	10,445	26.9
1921	39,119	6,162	15.7	3,522	9.0	18,605	47.6	10,828	27.7
1924	39,114	6,065	15.5	3,749	9.6	19,539	50.0	9,760	24.9

Arable Land and Population

For 1923 the area of arable land stood at the rate of roughly 1 cho per 10 people, while the average area per farming family amounted to 5.6 tan of rice-field and 5.5 tan of other cultivated field, total 1.1 cho.

Analysis of Arable Land

The total area of arable land amounts to about 15% of the gross area and is analysed as follows, in 1,000 cho:—

Year	Gross area	Paddy field				Upland field	Total % to gross area			
		One crop	Two or more crops	Fallow	Total		Total	Paddy	Upland	Total
1914	38,917	1,771	1,170	18	2,961	2,916	5,878	7.6	7.5	15.1
1919	38,864	1,791	1,213	25	3,030	3,105	6,135	7.7	8.0	15.7
1923	39,114	1,881	1,163	29	3,074	3,028	6,102	7.9	7.7	15.6

Area under Different Kinds of Crops

The relation between the area under crops and the nature of crops raised is shown below for 1923:—

	Area (cho)	% per 100 cho of area under crops	% per 100 cho of total area under crops
Total area	6,102,973.1	100.0	—
Area under principal crops	7,871,372.6	129.0	100.0
Foodstuffs	6,002,990.1	98.4	76.3
Industrial crops	297,781.8	4.9	3.8
Horticultural crops:			
Fruits	102,783.0	1.7	1.3
Vegetables	514,420.3	8.4	6.5
Green manures	424,206.9	7.0	5.4
Mulberry field	529,190.5	8.7	6.7

Growth and Decay of Area under Crops

Returns for six years ending 1923 show that the area added yearly for farming purposes shows steady decline, from 50,677 cho for 1918 to minus 16,942 for 1923, rice-field and dry-farms combined.

Year	Added area	Decayed area	Balance
1918	79,293.2	28,616.0	+ 50,677.2
1920	53,851.5	25,214.4	+ 28,637.1
1923	33,339.0	50,281.4	— 16,942.4

The greater part of area added was due to opening of wild land, next retrieving of wasted land, reclamation, etc. On the other hand, neglect and running to wilderness was chiefly responsible for the decay, followed by conversion to building premises, etc.

Share of Free Holding and Tenantry in the Total Arable Area

Free holding and tenantry occupied 48% and 52% respectively in the total area of rice land in 1923. For the area under other crops the corresponding figures were 54% for free holders and 46% for tenants. The share of the two classes of farmers worked out to 54% for the former and 46% for the other. It should be noted that during the 19 years ending 1923 the total cultivated area for free-holders increased only 9% while the rate for tenants was 19%.

Farmers and Total Population

Families engaged in farming at the end of 1926 were returned at 5,555,157, out of the total number of families of over 10,400,000 in Japan proper, i.e. 52.8% of the figures for the whole land.

Landed-farmers and Area of Cultivation

Landed farmers are classified according to the area of cultivation per family:—

Area cultivated per farmer's family	1920	1925	1924
Less than 5 "tan".....	2,492,235	2,478,580	2,470,162
" " 1 "cho".....	1,221,261	1,218,144	1,207,052
" " 10 " ".....	114,114	115,355	117,083
" " 50 " ".....	45,917	46,330	47,695
More than 50 " ".....	4,145	4,293	4,950
Total	4,997,592	4,979,018	4,970,444

Price of Arable Land

Assessed Value

The legal price of paddy and upland field as assessed decades ago still remains in force, so that it stands far below the market price, the average assessed value per tan of medium class being put as follows in the latest report of the Hypothec Bank of Japan, the figures showing the condition that obtained in March 1928:

	Maximum	Medium	Minimum
Paddy	¥644.00	554.00	440.00
Upland	505.00	389.00	230.00

As a matter of fact, the total assessed value has fallen with a partial reduction of the tax on arable land in 1911, though that on building area was subjected to addition in 1920. The figures below are given in ¥1,000:—

Year	Paddy	Upland	Building	Forest
1924	1,014,769	229,236	688,845	27,053
1925	1,013,150	230,015	606,085	27,150
1926	1,015,499	230,811	696,928	27,209

Market Price

The marked advance of price of farm produce between 1919 and '20 pushed up the price of farms, the medium paddy field per "tan" being quoted on the average at over ¥700 in Oct. 1919, or about $2\frac{1}{2}$ times the pre-war rate. With the economic slump in the spring of 1920 it fell to about ¥600. Agrarian troubles lately have much affected the market.

The average figure per "tan" of the two kinds of farms has been computed by the Hypothec Bank of Japan as below:—

	1923	1927	1928	1925	1924
Paddy	¥538	¥546	¥571	¥568	¥583
Upland	329	333	350	341	342

If from the average the figure for Hokkaido and Okinawa, the two lowest in Japan proper, is eliminated, it will stand much higher.

Rent

According to the data collected by the Hypothec Bank of Japan in March 1928 the tenant paid per "tan" of medium grade to the landowner in kind for paddy field and money for the other as follows:—

Paddy, 1.03 "koku"; upland, ¥18.47. The maximum paid is 1.26 "koku" in Kochi pref. and ¥32.13 also in Kochi pref.

Increase of Productive Power

On the whole the average productive power of tilled area has continued to make perceptible improvement, owing, in regard to rice, to greater development of the knowledge of cultivation in backward districts. When the farm adjustment work (which see) shall have been completed, far more satisfactory data may

be obtained in this respect. The average yield per tan of paddy field during the past few years is given below in koku:—

	1922	1923	1924	1925	1926
Average per tan.....	1.02	1.04	1.82	1.76	1.93

The average yield per "tan" of upland field (in "koku"):—

	1922	1923	1924	1925
Barley	1.779	1.915	1.933	1.757
Rye	1.378	1.366	1.415	1.055
Wheat	1.279	1.261	1.326	1.123
Total	1.478	1.514	1.558	1.295

Animal Labor in Tillage

Cattle and horses employed in tillage are returned as follows:—

Year	No. of animals used	
	Horned cattle	Horses
1922	1,134,451	1,152,654
1923	1,130,521	1,137,056
1924	1,126,157	1,112,730
1925	1,132,740	1,096,891
1926	1,069,641	1,220,051

Irrigation and Drainage

Government enquiries made in May 1924 show that the total irrigated area under tillage is 3,028,000 cho, of which 20.6% had ample supply of water, 55% sufficient, and 19% inadequate. The area of paddy-fields subject to defective drainage amounts to 19% while that suffering at time of flood represents 17%. Farming pumps are extensively used in many progressive prefectures. Tracts over 300 cho each that demand improved irrigation and drainage, cover altogether some 800,000 cho. One-crop area of paddy-fields occupies about 60% of the total under rice. Of the total extent of one-crop rice fields, about 136,000 cho or 4.4% of the whole surface under rice, cannot grow second crop owing to insufficient supply of water. Defective drainage stands in the way of utilizing for similar purpose of roughly 560,000 cho, which corresponds to 18.1% of the total land growing rice.

MANURES

The situation of fertilizers consumed in Japan is marked by the steady decline, from sanitary and wage standpoint, of the use of night soil, and on the other hand of the greater consumption of manufactured and other fertilizers on sale. The consumption of self-supplied manures is hard to estimate, but from the rough calculation made by the prefectural offices, it is judged to reach ¥316 millions a year, made up of ¥120 mill. for compost, ¥36 millions for green manure, ¥90 millions for night soil, ¥70 millions for others of this description. Similar figures for those fertilizers handled by traders are perhaps more reliable as the returns of home production and imports are available.

From these it is concluded that the average yearly consumption for the last three years amounts to ¥224 millions. Of that total bean-cakes form about 48%, sulphate of ammonia 14, mixtures 10, and superphosphate of lime 8.7. The progress of the fertilizer industry recently is briefly described in the chapter on Industry.

STAPLE FARM PRODUCTS

Rice

Year	Area (1,000 cho)	Produc- tion (1,000 koku)	Average production per tan (koku)	Exports (in 1,000)		Imports (in 1,000)	
				Quantity (koku)	Value Yen	Quantity (koku)	Value Yen
1923	3,148	55,444	1.761	35	1,163	1,620	30,718
1924	3,113	57,170	1.819	25	1,110	3,328	70,866
1925	3,154	59,704	1.893	89	3,976	5,136	120,499
1926	3,158	55,583	1.760	47	—	2,141	—
1927	3,172	62,101	1.957	35	—	4,129	—

Average for the five years ending 1927 is 58,000,000 "koku" in full.

Varieties of Rice Plant

Of the three main varieties of early, middle and late rice-plants, the middle variety is most productive, as the following average output per "tan" at all the Government Experiment Farms testifies:—

Yield per "tan" of the early variety ("koku")	2.120
" " " middle variety	2.334
" " " late variety	2.223
Average	2.255

Consumption and Home Supply

The domestic yield being generally short of the amount required for consumption, the shortage is met by import from the neighboring countries as well as Formosa and Korea. By balancing the amount exported and imported the total consumed at home in recent years is estimated as follows:—

Year	Mil. koku	Per capita consumed	Year	Mil. koku	Per capita consumed
1920	63,752	1.129	1924	65,789	1.124
1921	67,805	1.211	1925	67,038	1.129
1922	62,857	1.102	1926	68,249	1.132
1923	66,736	1.156	1927	67,201	1.099

Besides, the sake-brewers consumed during the five years ending 1926 about 4,314,064 "koku" a year.

Adjusting the Price of Rice

The Law for Adjusting the Supply has been in force since April 1921 to adjust the rice market. To keep the rice purchased State granaries have been erected at principal centres of distribution, at present Tokyo (300,000 "koku"), Osaka (200,000), Sakata and Moji, 50,000 each.

Barley and Wheat

(Production, in 1,000 "koku")

Year	Barley	Naked barley	Wheat	Total	Average per "tan" in full unit		
					Barley	Naked barley	Wheat
1923	5,595	5,856	5,190	18,641	1,590	1,041	1,064
1924	8,076	5,739	5,268	19,073	1,757	1,055	1,123
1925	8,829	7,779	6,126	22,393	1,933	1,415	1,304
1926	8,569	7,437	5,895	21,891	1,915	1,366	1,261
1927	7,569	7,314	6,059	20,569	1,779	1,378	1,279

Barley, naked barley and wheat constitute the staple crops in upland farms and are also very extensively cultivated as second crops after rice. Naked barley is raised more as a second crop while the other two are cultivated in greater proportion in upland farms, as shown below, the figures shown being those for 1927:—

	Barley (cho)	Naked barley (cho)	Wheat (cho)
Paddy-field	109,542	316,536	193,143
Upland farm	315,978	214,124	280,617

The first two are principally used as food for men, and generally mixed with rice. This mixed diet is almost universally used by country people and also by others who prefer it to pure rice on account of its being more digestible than the other. Those affected by leg dropsy generally prefer the mixed ration. Wheat is used more as subsidiary food-stuffs, as for making macaroni, confectionery, etc. The amount consumed for brewing Japanese soy is enormous. Wheat is imported in large quantities from U.S.A. and other countries, either in the original form or as flour.

Miscellaneous Grains

(Production, in 1,000 "koku")

Year	Proso millet	Buck- wheat	Foxtail millet	Barnyard millet	Maize
1924	238	895	1,411	463	690
1925	248	1,032	1,425	644	692
1926	167	817	1,241	588	575

The millets are raised in mountain districts not fit for rice paddies, and are used as ordinary articles of diet by poorer folks residing in remote places. Buckwheat flour is extensively used for making a popular Japanese article of diet, i.e. buckwheat macaroni. Maize as grown in Japan proper is chiefly used as food taken between regular meals, and it is in only Hokkaido, where it is extensively cultivated, that the ears are used for making flour or for feeding cattle.

BEANS, POTATOES AND SWEET POTATOES

(Production in 1,000)

Year	Soya bean (koku)	Red bean (koku)	Pea (koku)	Horre bean (koku)	Sweet potato (kwan)	Irish potato (kwan)
1924	3,242	990	373	478	1,956,038	233,351
1925	3,609	1,061	338	486	995,469	259,690
1926	2,999	676	381	490	885,948	228,694

Among subsidiary farm crops there is perhaps nothing which plays so important a part in the Japanese kitchen as soya beans. The three daily articles of diet for all classes, viz. soy, miso and tofu are manufactured with this bean either in part or wholly. The "tofu" (bean curd) is one of the most popular articles of diet, being cheap and highly nutritious; the "miso" makes Japanese soup and is used in various other ways. The "soy" is indispensable in Japanese cooking. Then for extracting oils, as manure, and food for horses beans are equally important. The supply being insufficient, a large quantity comes in from Manchuria and Korea. In Japan, Hokkaido is the principal centre of production. Red beans, also very extensively produced in the northern island, are used for making confectionery. Peas and horse-beans, whether green or fully ripe, are cultivated as a second crop after rice and as a forerunner to rice, indigo, etc. on upland farms. Groundnuts are among the subsidiary farm produce that goes abroad, mostly to U.S.A. In Japan they are used by confectioners and also for pressing oil. Sweet potatoes occupy an important place as supplying a cheap substitute for rice for poorer folk, while the tubers are also used for making starch and some alcoholic drinks. Potatoes, first brought by the Dutch in 1589, remained comparatively neglected till about a few decades ago, when the importation of superior varieties drew the attention of farmers. The tubers go to Russian Siberia and Manila. The best potatoes come from Hokkaido.

PRODUCTION OF SOME SPECIAL CROPS (in 1,000)

Year	Leaf indigo (kwan)	Leaf tobacco (kwan)	Cotton (kwan)	Hemp (kwan)	Rape-seed (koku)
1924	1,172	17,003	483	2,231	586
1925	952	17,349	361	2,130	587
1926	516	16,751	260	2,489	580

Of the above, leaf-tobacco cultivation, being under special protection of the Government Tobacco Monopoly, shows perceptible progress as to output. The next three, especially cotton and indigo, owing to the encroachment of imported goods, have markedly fallen off.

PRODUCTION OF OTHER MINOR CROPS (in 1,000 "kan")

	1926	1925	1924	1923
Radish	638,549	628,561	607,586	631,062
Carrot (<i>Daucus carota</i>) ...	28,665	28,575	26,693	28,735
Burdock (<i>Lappa major</i>)..	49,118	49,499	48,031	50,102
Ginger	—	7,355	7,412	7,167
Chillies	—	554	376	387
Lily	—	965	1,228	1,547
Paper mulberry (bark dried)	4,201	4,589	4,762	5,098
Rush for matting.....	11,448	12,933	14,915	10,926
Peppermint	11,087	10,301	6,290	4,909
Flax	8,545	8,956	5,865	7,792
Wax tree (seed).....	5,830	6,201	6,203	7,275
Taro	154,965	159,217	149,070	161,230
Turnip	39,960	38,047	38,551	39,402
Cabbage	27,077	27,583	25,176	27,431
Onion	22,589	20,089	16,251	20,300
Welsh onion	52,684	50,803	46,832	48,078

STOCK-BREEDING

Stock-breeding has not thrived well in Japan, for religious reasons, climatic condition, absence of custom that requires a supply of animal products, such as leather, hides, bristles, etc. Cattle and horses were reared, the former by the farmer as help in tillage and beasts of burdens, while the latter were kept both for riding and also for farmers' uses. The rearing of swine dates from the Restoration while that of sheep has begun to receive serious attention since the world war.

Horned Cattle

Strictly speaking, only one original breed of cattle formerly existed in Japan, being primarily intended for the sole purpose of serving as beasts of burden. They are sufficiently hardy and strong, but owing to neglect in breeding, are somewhat deformed in appearance, especially in the hind quarters. Though uniform in breed, native cattle admit of being broadly sub-divided into two or three varieties, principally by color. One of them is black with small white spots on the belly, the second is brown, while the third is brindled with black and white spots. The black breed, which, by the way, is most valued by our people, predominates in the northeastern districts and the middle section of Honshu, as also in Shikoku and Kyushu; the brindled variety is found in the other parts of Kyushu. Of the three, the brindled cattle very much resembles in appearance the Dutch cattle, and probably this variety may be the descendants of foreign cattle imported into Japan at some unknown time. They also possess comparatively well formed heads. The brown variety apparently came originally from Korea.

Just as in the case of horses and dogs, the native breed of cattle is gradually disappearing to be replaced by imported cattle and cross. This disappearance of the native breed is regarded with extreme regret by consumers of beef, for the flesh of native cattle tastes far better than that of foreign cattle. As to the breed of imported cattle, formerly it consisted mostly of Shorthorn, Devon and Ayrshire. Brown-Swiss and Shimmmenthal, but lately Holstein and Ayrshire are generally judged more suitable for Japan. Various measures are adopted for improving the cattle. The work of inspecting bulls for service that was formerly left in charge of provincial authorities was transferred in July '07 to the direct control of the central Government. Then prizes are bestowed by the Government on the cattle which have won 1st to 3rd prizes at district cattle shows.

Three cattle depots are kept by the Department of Agriculture and Forestry, at Nanatsukahara, Oita, and at Tsukisappo, near Sapporo. The bulls reared and kept in these depots are leased out or sold to the provincial cattle and horse depots, and to the private live-stock guilds with a view to improving the breed of cattle owned by private individuals. A small sum of money is also granted to private-owned bulls.

Horses

The experiences of the Japan-China War (1894-95) and later of the Russia-Japan War (1904-5) convinced the Government

and the public of the imperative need of improving the native stock. In '06 the authorities established the Horse Bureau and even encouraged horse racing. The pari mutuel, that was declared illegal by the judiciary in 1908, has recently been revived in modified form to back the sport. The policy of the Bureau is to keep for the service 1,500 stallions of foreign breed and to distribute them to principal breeding centres where they are to be paired with mares of native breed. The improvement programme is to extend over 28 years beginning with '06 and is estimated to require an outlay of about ¥30,000,000. The Army purchases every year between four and five thousand horses.

Native Stocks.—Native stocks that originally existed belonged to the Mongolian breed; later on they received more or less intermixture of the blood of Persian breed, horses of this description having been imported to some extent as early as three centuries ago. Principal breeding centres are found in northern districts of the Main Island and in Hokkaido, in both of which exist comparatively wide plains. In the former, Nambu, Sendai, Miharu and Akita are famous for horse-breeding, as is the province of Hidaka in Hokkaido where the Imperial Household's Nilcup Depot is situated. In Southern Japan, Kagoshima ranks first in horse-breeding. Among the native breeds Nambu horses are the best.

Improving Breed of Horses.—For the purpose of improving the breed of horses and otherwise realizing the object for which the Horse Bureau was founded, four kinds of establishments are maintained throughout the country, they being as follows:—

1. Pasture, (3)—in Iwate, Hidaka, Tokachi.
2. Stud, (5)—in Iwate, Kumamoto, Miyagi, Akita, etc.
3. Depot, (1)—in Iwate.

Castration.—The experience obtained on the occasion of the Japan-China War and especially on that of the Boxer trouble in 1900 convinced the authorities of the necessity to enforce castration, for the horses sent by Japan were markedly inferior and vicious to those belonging to the armies of other countries. The law was enacted in 1901, and the authorities, to encourage castration, give a small grant of money when a horse dies or is disabled from the effect of castration.

Sheep

Sheep-rearing is still the most backward of all the branches of stock-farming in Japan, the annual product of wool barely reaching 10,000 kin. Wool and worsted consumed are all product of foreign origin. The War and the great difficulty experienced in getting a supply of wool from Australia, etc. strongly impressed both Government and people with the necessity of adopting suitable measures for supplying this important textile material at home. As the first step for encouraging sheep-farming, in the 1918-19 session the Diet voted ¥330,000, to import in the course of 1918 over 1,500 sheep from Australia, England, U.S. and China, and to distribute them among government and private pastures. It was further proposed to import every year beginning with 1919 over 1,000 heads with a view to popularizing the industry among native farmers as their subsidiary trade, a

sum of ¥400,000 being set apart for this purpose for the 1919-20 fiscal year. ¥5 is granted per head to farmers who keep sheep. At the end of 1926, there were reared 17,901 sheep. The number will soon be increased to 20,000.

To avoid the failure that nipped in the bud the first attempt made in the early eighties, special arrangement for treating sick sheep will be provided at Government expense. The Shropshire, Southdown, Rambouillet-Merino and Chinese breed are reared at present for the breeding purposes. In 1920 over 1,100 head were imported for this purpose from America, China and England and distributed among 5 State depots, Iwasaki's Koiwai Agricultural Station (Iwate-Ken), etc. A State aid of ¥40-50 per head is granted to the private depots in charge of these breeding sheep.

Stock-Farming Statistics

Number of Cattle

Year	Cows	Bulls	Total	Calving	Deaths
1924	1,040,408	415,835	1,456,243	212,369	18,499
1925	1,047,357	412,296	1,459,653	209,928	18,994
1926	1,051,094	414,055	1,465,149	200,485	14,858

Number of Horses

Year	Horses	Colts	Total	Fillings	Deaths
1924	1,255,495	313,190	1,568,685	110,644	31,655
1925	1,237,153	316,155	1,553,308	110,704	29,520
1926	1,167,605	318,848	1,486,453	110,428	28,476

The total includes some Government horses which are not specified in the table.

Number of Sheep, Goats and Swine

Year	Sheep	Goats	Swine
1923	14,950	158,934	667,820
1924	15,710	157,852	743,283
1925	17,359	168,265	672,583
1926	17,901	179,089	621,466

Slaughtering Returns

Year	Cattle	Calves	Horses	Sheep & goats	Swine
1924	318,530	25,920	77,445	9,336	588,967
1925	295,911	22,899	77,011	11,539	766,187
1926	279,405	22,345	74,154	11,593	597,264

POULTRY

Poultry has not yet attained any particular development. It still occupies an almost insignificant position as a subsidiary work of farmers, poultry-yards on any large scale being practically non-existent. For a while Japan used to import a large quantity of eggs from China. With import tariff raised in 1902 from 10 per cent. to 25, then to 50 some years after, the import

has markedly fallen off. With the idea of encouraging this industry the Government established a model poultry-yard in '06 at the Breeding Experiment Farm at Chiba, where imported fowls of various breeds are kept. Eggs are sold at cost price.

Statistics on Poultry (in 1,000)

At the end of June	No. of fowls	Fowl			Egg (output)	
		No. of fowl	No. of chicken	Value (Yen)	No.	Value (Yen)
1924	3,500	19,986	17,103	39,929	1,615,849	71,150
1925	3,503	20,614	16,556	38,881	1,619,716	70,038
1926	3,475	20,881	17,628	39,513	1,731,089	75,255

DAIRY AND MEAT-PRESERVING

Dairying is a new industry and is still in its infancy. The use of milk is naturally very much limited, as the Japanese generally confine themselves to its use in fresh state, and use comparatively little in cooking. The price is rather too high, about 80 sen—1 yen per sho (1.58 quart). The quality is inferior. Butter-making is regularly carried on only in dairy farms situated in remote districts, but their whole output does not much exceed 10% of the total consumption. Butter made in Hokkaido, at Koiwai and the Kozu farms commands a good price. Condensed-milk industry has not yet grown into a regular business. Cheese-making is also insignificant. In meat preserving the only thing worth mentioning is ham, of which "Kamakura ham" made in Kanagawa-ken is noted and is largely exported to China, etc. The supply of beef being insufficient and the price very much higher than in Europe and America, there is hardly material enough to encourage preservation business.

Statistics on Dairy

Year	No. of houses	No. of milk cows	Milk output	
			Quantity (koku)	Value (Yen)
1924	16,000	60,825	638,030	26,940,759
1925	17,221	65,443	702,223	28,461,302
1926	17,406	69,434	779,129	27,305,750

ANIMAL EPIDEMICS

Rinderpest makes its appearance now and then and inflicts heavy damage on owners of milk cows and general stock-breeders. It comes chiefly from Korea, but rarely from China, and plays havoc at places adjoining Kobe, Yokohama and other open ports. Hokkaido is comparatively free from the attack. To prevent the import of diseased cattle the authorities enforce strict examination at Fusan and at ports of import, but this provision is still found insufficient. A small compensation is allowed for cattle slaughtered. The number of animals affected during the last few years is shown below:

Year	Anthrax		Black leg (Cattle)	Cholera (Swine)	Erysipelas (Swine)	Hydrophobia				
	Cattle	Horse				Dog	Cattle	Horse	Pig	Sheep
1924	186	58	97	17,863	326	3,205	36	84	—	2
1925	182	35	88	2,736	52	3,093	34	27	4	6
1926	295	53	91	2,670	308	1,804	17	11	2	—

HORTICULTURE

Horticulture, especially fruit-culture, has recently shown a marked activity. Pears, oranges, persimmons and peaches were principal fruits in old days. With the introduction of the meat-eating custom and owing to improved facilities of communications, a great change came over the habits of the people in the use of fruits. Apples, foreign oranges, peaches, pears, grapes, etc. began to be extensively cultivated. At present orchards of oranges, peaches, apples, etc. are found in various localities. Generally speaking, apples are grown in Hokkaido and Aomori, peaches in the neighborhood of Tokyo, Kanagawa, Okayama and other prefectures, pears in Shizuoka, Okayama, Niigata, Akita, etc., grapes in Yamanashi, Ibaraki, Nagano, etc., oranges in Wakayama, Shizuoka and in Southern Japan, apricots, almonds, walnuts and some other fruits in Nagano and a few other prefectures. Persimmons may be said to grow everywhere, though seldom in orchards. Plums are more generally used as pickle, in which shape they are preserved in almost every household, and plum trees are highly valued both for flowers and fruits. In Japan cherry trees are prized more for their flowers, and their fruits are altogether secondary. Foreign cherry trees are largely cultivated in Yamagata and Fukushima.

Output of Fruits (in 1,000 kwan)

Year	Plums	Peaches	Pears	Persimmons	Apples	Grapes	Orange
1923	378	11,236	26,884	44,275	8,001	7,384	3,447
1924	328	10,172	27,537	62,628	10,628	7,981	3,175
1925	411	11,943	33,190	42,899	15,387	9,466	3,268
1926	398	12,008	35,175	70,897	26,017	10,856	3,859

N.B.—Plum in 1,000 koku.

SERICULTURE

Silk is Japan's staple commodity on the export list, supplying about 68% as against 19 of China and 10 of Italy in the total consumption of the world, and about 81% of that in U.S.A. In the farmers' economy sericulture plays almost as important a part as rice cultivation, and indeed were it not for the profit derived from this subsidiary occupation, Japanese farmers of middle and lower grade would hardly be able to maintain themselves. By rearing the worms in the three seasons of spring, summer and autumn, farmers can at least double the amount obtained from ordinary farming alone. The discovery that the hatching season may be freely regulated by keeping the eggs in cool places has made it possible, by aid of artificial hatching method, to undertake summer and autumn rearing and to double the output of cocoons. As sericulture has seldom succeeded when

conducted on a large scale, it looks as if it were specially designed for the benefit of otherwise hard-driven small farmers.

Japanese raw silk is characterized by its high lustre and little wear in glossing, and the filament from the best cocoons measures from 2,000 to 2,500 "shaku" in length and weighs from 0.07 to 0.08 "momme" (1 "shaku"=about 1 foot: 1 "momme"=3.75 grammes). Both in fineness and uniformity of quality marked improvement has been effected of late thanks to better methods of rearing and reeling.

Some of the latest improvements recently effected in silk raising are briefly described below:—

1. Conditioned-Weight in Raw Silk

The long-standing custom of handling raw-silk in non-conditioned weight, containing a slight moisture, has been superseded by an improved practice obtaining in Europe and America where transaction is made on the non-moisture weight system plus 11 per cent. of moisture. The defective state of the conditioning machinery in Japan stood in the way of adopting the system as suggested by American silk trade people, but with the completion of a newly equipped Silk Conditioning House in Yokohama the Government was in the position to enact Law No. 35 for Conditioning Raw-silk for Export. It provides that no raw silk may be shipped abroad without passing the examination of the Conditioning House and that transactions should be done only in conditioned-weight. The law came into operation in July, 1927, the two conditioning houses in Yokohama and Kobe being placed under it.

2. Transactions in Dry Cocoons

The customary practice of trading in raw cocoons only as they are picked from their spinning-nests subject both cocoon-merchants and breeders to serious disadvantage as the transactions require to be done in a hurry while the cocoons are still fresh. Nor are filature people less inconvenienced by this simple mode of transaction inasmuch as too much fund is required all at once to get a supply of the raw material. Another defect of the existing business practice is that the raw cocoons require special care in storing before they are reeled, not to speak of damage in transit. In view of these considerations the Government is encouraging the erection of cocoon store-houses by offering a subsidy. The store-houses so far built number 28 and are capable of holding 161,740 koku (826,491 American bushels).

3. Unification of Silk-worm Breeds

The diversity of the breeds naturally militates against the uniformity of the filaments, not to speak of their intrinsic quality. Indeed lack of uniformity has long been a standing complaint against Japanese raw silk on the European and American markets, which demand a large quantity of raw silk threads of uniform quality. To minimize that trouble, the central and local authorities established sericultural laboratories

In order to raise superior breeds for distribution among the breeders. Thanks to the united efforts of all those concerned at present 92 per cent. of the spring breed and 81 per cent. of the summer and autumn breeds consist of the eggs originally distributed by the national and local laboratories, this going far towards the unifying of the threads produced. One of the most important researches carried out in this direction is the discovery that the crosses between the native breeds and either the Chinese or European breeds are markedly superior in all respects than a pure native breed. Which of the sundry crosses is best adapted for rearing in a particular district is demanding the closest attention of those concerned. To determine the selection most of the important sericultural districts keep their own experimental stations at Okinawa, which is much warmer than the rest of Japan proper, and there carry out experimental rearing between the month of February and April to determine the breeds judged best for raising in their own particular districts. About 40 such experimental laboratories exist in Okinawa, and it is thought that in time breeds best adapted for particular districts will be fixed.

4. Improved Mode of Feeding

The mode of feeding the worms has received noticeable change as regards saving of labor and rearing space, and so economise cost. Formerly the tiny worms in the first stage of hatching were fed with fine cut leaves, but they are now given whole tender leaves, while the grown worms are fed on the leaves with twigs on in the spring season, and this simplified method is said to be adopted by some 20% of the total number of raisers. Economy of labor thereby effected is by no means small. Then in some sections of the Kwanto districts rearing has been tried recently under tent or on the shelves suitably arranged under the eaves of the houses. It is even claimed that this simple mode of rearing is no worse as regards the growth of the worms than indoor feeding. When the season happens to be too wet the period of cocooning may be somewhat prolonged, but after all it is doubtful whether such rough mode of feeding is well suited for a rainy climate as Japan. Be that as it may the zealous endeavors made by our sericulturists to introduce economising innovations in the mode of rearing and feeding may have beneficial effect on the development of the industry.

5. Treating the Eggs for Summer and Autumn Rearing

So remarkable has been the development recently made in rearing the summer and autumn breeds, that today their products do not much differ from those of the spring worms, at least in volume. This is due first to the fact that the time for rearing them is much shorter than that for the spring breed, and moreover it falls in the season when farmers are less pressed by rice cultivation. Aided by this double advantage they can rear two or three courses of the worms, and hence secure so many crops of cocoons. There are, however, some serious drawbacks attending this later rearing, as the season is too warm and wet to suit the healthy bringing up of the worms, and next the

egg-cards being kept cold for a long time to arrest premature hatching the growth of the worms is abnormal and the cocoons obtained are therefore inferior in quality. The question of how to overcome these defects has been practically solved after the long researches by the experts, both Government and private. The new process discovered by them consists in forcing at a required time the hatching of the eggs by application of certain chemicals. At present, over 84 per cent. of summer and autumn worms come from the eggs thus artificially treated.

6. Silk-worm Egg Cards

The extinction in practice of the once dreaded plague known as pebrine that attacked the worms has resulted in simplifying the manufacture of egg-cards, the process in vogue in Italy and other sericultural centres in Europe having been adopted, this being called in Japan "the flat method" and "grain method" (in which the eggs are left as individual grains). The latter process has the advantage of allowing the grower easily to estimate with greater accuracy the quantity of the eggs.

7. New Reeling Process

Formerly the cocoons were left floating in a hot-water basin when reeling, but this process is likely to be superseded by a sinking method, in which the boiled cocoons sink to the bottom under the weight of the water that soaks into the cocoon-shell. The new process possesses the merit of easier reeling, improved quality of the filaments, greater efficacy in reeling, and economy in cost of production. The State laboratory is trying to popularize the method, and already over 37 per cent. of the total number of reeling establishments are following it.

Reeling Establishments and Production

As officially investigated, reeling establishments in Japan numbered 83,568 in 1927, or 8,183 (9%) below the preceding year. Classified by the number of basins employed the figures are as follows:—

Establishments classified by No. of Basins

	Those with less than 10	Those with 1-5	Those with 50-100	Those with 100-300	Those with over 300
	80,034 (95.8)	1,734 (2.1)	875 (1.0)	707 (0.8)	218 (0.3)
Compared with					
1926	-8,277 (9.0)	-13 (1.0)	+37 (4)	+58 (9)	+12 (6)

Classified by Kind of Thread produced

	1927	Compared with 1926
Filatures	3,787 (4.6%)	+19 (5)
Hand-reeling	66,587 (79.6%)	-6,992 (10)
Douplons	13,194 (15.8%)	-1,210 (8)

There was marked increase of filatures, recently, with a slight break after 1922, in striking contrast to the steady decrease of

hand-reeling business. Douplons that were gradually gaining till 1922, have declined since then.

Number of Basins employed for Reeling

Total 1927.....	425,691	1926.....	427,171
Establishments using less than 10 basins.....	105,581		24.8%
" " " 10- 50 basins	42,918		10.1%
" " " 50-100	58,365		13.7%
" " " 100-300	110,927		26.1%
" " " 300 or over ..	107,903		25.3%
Filatures 297,679 basins			69.9%
Hand-reeling 66,587 ..			21.8%
Douplons 35,065 ..			8.3%

Filatures and Number of End of Thread

Total 1927.....	1,200,994	1926.....	1,112,607
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Classified by the number of basins employed the average number of threads-ends per basin is shown below:—

Filatures employing under 10 basins	7,703	1.0%	Aver. thread-end	2.9
" " " 10-50 ..	113,775	9.0"	" " "	3.4
" " " 50-100 ..	192,305	16.0"	" " "	3.7
" " " 100-300 ..	430,314	36.0"	" " "	4.2
" " " 300 or over ..	456,897	38.0"	" " "	4.4

Reeling Operatives

Total 1927...	496,329 (M. 33,735, F. 462,594)	1926...	483,342
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The distribution of operatives among the reeling shops as classified by the number of basins employed is as follows:—

In shops employing under 10 basins.....	106,305	21.4%
" " " 10-50 ..	46,783	9.4%
" " " 50-100 ..	66,047	13.3%
" " " 100-300 ..	135,856	27.4%
" " " 300-500 ..	63,915	12.9%
" " " 500-1,000 ..	66,216	13.3%
" " " over 1,000 ..	11,207	2.3%

Classified by the kind of thread produced the figures are:—

Number of operatives at filatures.....	365,576	73.7%
" " " " hand-reelers	93,504	18.8%
" " " " douplon shops	37,249	7.5%

Production of Raw Silk

The following figures represent production in 1927:—

	Filatures		Hand-reeling		Douplons	
	Prod. (kwan)	%	Prod. (kwan)	%	Prod. (kwan)	%
Raw silk	8,961,747	89.2	458,536	4.6	620,618	6.2
Waste silk	3,387,429	89.8	157,160	4.2	228,159	6.0

The growth of raw silk and waste silk both in quantity and value in recent years has been steady, and though this tendency has taken a bad turn of late, especially as regards value, the

output continues as active as ever. The figures for 1927 are the highest so far known.

Fluss Silk

In 1927 the statistics for this article are:—

Establishments, 23,944; output, 90,014 kwan; value, ¥2,808,835; being 14,473 kwan larger in output and ¥262,432 more in value than in the preceding year.

Selection of Silkworm Eggs

The Imperial Sericultural Experiment Station has come to the conclusion after years of experiments that the crossed silkworm eggs between Japanese, Chinese and European breeds of the first generation are the best for the purpose for which they are intended. The Station now prepares and distributes them free to local institutes either prefectural or otherwise, which in turn carry on reproduction and distribution for the benefit of private reproducers.

Recent Progress in Sericulture

The remarkable development made by the sericultural business of Japan during the last forty years is shown in the following quinquennial statistics:—

Every 5 years	Average amount of cocoons crops (kamme)	Index number per cent.
1885-1889	11,388,682	100.0
1890-1894	15,441,414	136.7
1895-1899	21,517,974	190.6
1900-1904	26,484,132	234.6
1905-1909	32,622,124	288.9
1910-1914	43,184,692	382.5
1915-1919	61,560,686	545.3
1920-1924	66,360,485	587.8

Kamme (or kwan)=8.26738 lbs.

For this striking progress in sericultural business was chiefly responsible the greater activity of summer and autumn rearing, especially the latter, which now contributes nearly 50% of the total quantity of cocoons produced. The index numbers attesting this tendency are given below:—

	1905	1910	1915	1920	1925	1927
Spring cocoon	100.0	136.8	146.1	178.3	242.3	260.9
Summer & Autumn cocoon	100.0	155.2	216.3	333.6	440.0	470.3
Total	100.0	143.2	170.7	232.6	311.4	334.1

The development in the technical skill of growers has been no less marked in recent years, as may be judged from the following figures:—

Year	Yield of cocoons per 1 egg-card deposited by 25 moths (momme)	Yield of cocoons per rearing family (momme)
1905	1,852	18,342
1910	2,257	26,665
1915	2,440	27,771
1920	3,100	33,423
1925	4,783	43,516
1927	4,935	43,255

Sericultural Households

Year	Sericultural families by season	
	Spring	Summer & autumn
1923	1,644,099	1,677,599
1924	1,660,802	1,702,290
1925	1,718,211	1,816,423
1926	1,804,835	1,914,943
1927	1,847,895	1,949,935

Output of Cocoons

Number of egg-cards hatched, output of various grades of cocoons produced, and rate of cocoons turned out per egg-card are given in the following table:—

Year	Egg-cards hatched (in 1,000)	Output of cocoons (1,000 kwan)				Total Value Yen 1,000	
		Normal	Double	Waste	Total		
Spring crop	1923	7,843	35,185	3,243	1,509	39,936	419,869
	1924	7,550	34,960	3,070	1,447	39,478	268,062
	1925	7,610	38,106	3,341	1,479	42,927	445,617
	1926	7,612	39,248	3,242	1,666	44,156	381,230
	1927	7,470	41,214	3,368	1,647	46,229	307,987
Summer and Autumn crop	1923	9,178	24,806	3,253	1,545	29,604	240,535
	1924	9,311	28,958	3,756	1,627	34,341	283,618
	1925	10,121	35,440	4,592	1,841	41,872	378,639
	1926	10,349	35,694	4,718	2,157	42,569	280,216
	1927	10,959	—	—	—	44,748	188,944

(1 kwan=8.26738 lbs.)

Cocoon Crop for 1927

In the early spring of 1927 severe frost inflicted no small damage on mulberry plantations in Nagano, Gumma, Gifu and other leading sericultural districts, but after the hatch-out of spring cocoons, weather condition continued favorable to the growth both of mulberry leaves and young silk worms throughout the country, so that the cocoon crops for the whole year resulted in a gain of 91,170,640 kwan or 5.1 per cent. on the figure of the previous year.

No. of egg-cards hatched	Spring		Summer & Autumn	
	Sheets	Comparison with 1925	Sheets	Comparison with 1925
hatched	7,470,624	- 142,122	10,959,405	+ 609,798

	(kwan)	(kwan)	(kwan)	(kwan)
Cocoon yields	46,228,627	+2,072,908	44,748,255	+2,178,473
(+ increase; — decrease)				

N.B.—The total number of rearing families was 2,103,265 and the volume of the yield 90,976,882 kwan, or ¥496,931,802, the former being an increase of 41,678 (2.0 per cent.) and the latter an increase of 4,251,381 kwan (4.9 per cent.), compared with the figures of the previous year.

Number of Silk Reelers

The silk reeling households and establishments as classified by the number of basins make the following record:—

No. of Establishments and Reeling Basins

Year	under 10 (1,000)	more than 10	more than 50	more than 100	Total (1,000)	Reeling basins (1,000)
1923	200	1,684	818	844	204	540
1924	194	1,896	1,129	865	198	559
1925	182	1,903	1,041	846	186	535
1926	88	1,747	838	855	92	427
1927	80	1,734	875	925	84	426

Filatures equipped with more than 5,000 basins are:—

Katakura Reel and Spin. Co. (18,000), Yamaju-gumi (16,000), Gunze Reel Co. (6,000), and Oguchi-gumi (6,000).

Output of Raw Silk (in 1,000: 1 kwan=lb. 8.267)

Year	Raw silk		Waste silk etc.		Total Yen
	Kwan	Yen	Kwan	Yen	
1923	6,756	795,945	2,515	17,881	813,826
1924	7,577	837,231	2,879	22,403	859,633
1925	8,284	956,052	3,533	30,307	986,359
1926	9,160	856,477	3,558	24,422	880,900
1927	10,041	812,394	3,773	19,639	832,033

Silkworm Eggs

Amount Produced (in No. of moths)

Year	No. of producers	Reproductive silkworm eggs	Industrial silkworm eggs	Total
1922	8,782	19,963,319	690,711,591	710,674,910
1923	8,485	17,509,967	713,595,053	731,105,020
1924	8,057	15,811,156	698,596,876	714,408,032
1925	7,676	16,220,929	777,705,559	793,926,488
1926	7,477	16,208,200	805,423,835	821,632,035

Mulberry Plantations

Year ending June	Area of fields (cho)	Year ending June	Area of fields (cho)
1922	512,836	1925	549,307
1923	529,191	1926	571,707
1924	537,388	1927	594,602

cho (area)=2½ acres.

Sericultural Economy and Menace of Rising Wages

The fact that silkworm rearing is essentially dependent upon manual labor has been a vital factor in the prosperity of this primary industry in Japan, as it has baffled the ingenuity of Western inventors, even of America, in devising labor-saving appliances adapted for this special operation. With the progress of time, however, this important asset of Japan is in danger of turning out to be a serious handicap in the successful management of the industry. In other words, the steady advance of wages in Japan, in common with the rest of the world, has begun to disturb the established equilibrium between the various factors forming the cost of production. The item of wages is shooting far ahead of others, as shown below:—

Cost of Production per "Kamme" of Cocoons

	1924	1923	1919
Rent	11.0%	12.2%	17.0%
Capital	34.4	39.4	45.0
Wages	54.6	48.4	37.0
Total	100.0	100.0	100.0

The above data were obtained by the Raw Silk Association of Japan and the Provisional Industrial Commission.

To cope with this menace sericulturists are driven more and more to adopt the extensive-culture method in place of the intensive method formerly in vogue. Thus in the ten leading rearing centres, as Nagano, Gumma, etc. the eggcards hatched per family establishments are growing in proportion while in feeding the worms the leaves given are less carefully prepared than before. Some proof of this statement is to be found in the following statistics showing the scope of rearing and the ratio of cocoon-crop obtained:—

Scope of Rearing and Ratio of Cocoon Crop

	1900	1907	1914	1919	1927
Egg-cards hatched per family (sheets)					
In 10 leading districts.....	12,370	15,420	17,070	15,780	10,784
other districts	6,490	7,320	7,920	8,140	6,735
Average for whole country...	9,250	11,140	12,470	11,570	8,779
Cocoon crop per family ("kwan")					
In 10 leading districts.....	25,664	32,431	39,117	46,923	49,313
Other districts	13,332	17,106	21,224	28,763	35,912
Average for whole country....	19,113	24,327	30,421	37,183	43,222
Crop per 1 card ("kwan")					
In 10 leading districts.....	2,070	2,102	2,291	2,972	4,573
Other districts	2,054	2,334	2,679	3,592	5,331
Average for whole country....	2,066	2,183	2,424	3,212	4,949

Sericultural Institute

The Imperial Sericultural Experiment Station.—This is a Government Institute undertaking scientific researches and investigations on all problems relative to the sericultural industry and also holding lectures and classes for training experts and

flature, hands. The Station is situated at Nakano, a suburb of Tokyo, with branches in Ayabe, Maebashi, Fukushima, Matsumoto, Ichinomiya and Kumamoto, all local centres of the industry.

TEA

Tea, in contrast to other leading industries, has remained stationary, both in gross output and volume of export. The latter, principally to America which takes over 80% of Japanese export teas, has even declined in the presence of formidable rivals, i.e., Ceylon, India and Java teas. The American consumers, however, still favor the Japanese leaves as they possess a special flavor and preserve their quality much longer than their rivals. The cost of production is higher in Japan than in other centres of manufacture, labor saving appliances being used to less extent than in India and Java. Although our tea associations are prejudiced against the machine-making process on the ground that it leads to deterioration in quality and flavor, it is steadily gaining ground as it reduces materially cost of production. The Shizuoka Tea Manufacturers' Association estimates the cost of hand-made tea in 1917 at ¥1.00 to ¥1.20 per kan as against only 35 to 45 sen for machine-made tea, while in 1918 the figures stood at ¥1.30 to ¥1.50 as against 45 to 60 sen.

In 1880 manufacturers associations were established under the Government's guidance in all the tea producing districts with the central council in Tokyo. Their duties were defined by the Government, and include prevention of the manufacture and sale of inferior or adulterated tea, improvement and unification of packing and drying and compulsory inspection of the member manufacturers' products. The Central Council in Tokyo maintains inspection houses at Yokohama, Kobe, Shizuoka, Yokkaichi and endeavors to prevent the export of adulterated or colored tea which might be rejected by tea inspectors abroad, and also is running its experimental plantation and laboratory in Shizuoka.

Recently the center of the export business has shifted from Yokohama to Shimizu, as that port is nearer to Shizuoka, where 40% of the total output is produced. During the tea season American liners call at Shimizu for the sole purpose of taking on tea consignments.

Statistics on Tea

Year	Area (cho)	No. of manufacturers	Year	Area (cho)	No. of manufacturers
1921	47,032	1,151,329	1924	43,575	1,092,949
1922	44,447	1,117,787	1925	44,062	1,106,867
1923	44,263	1,129,269	1926	44,503	1,147,548

cho (area)=2½ acres.

Output of Various Kinds of Tea (kwan)

Year	Green tea 2nd kind (Gyokuro)	Green tea 3rd kind Sencha	Green tea 4th kind Bancha	Black tea	Others	Total incl. others
1923	70,803	7,204,391	2,065,100	1,724	234,228	9,576,656
1924	66,057	7,218,826	2,033,178	998	221,428	9,540,482
1925	68,480	7,838,364	2,078,548	1,497	231,929	10,218,810
1926	70,589	7,507,814	1,991,026	5,994	84,651	9,660,065

Leading Tea Producing Districts (1926)

District	Output (Kwan)	Value (Yen)	District	Output (Kwan)	Value (Yen)
Shizuoka ..	4,501,860	12,876,796	Sagami ..	242,805	1,561,305
Kyoto	463,601	2,531,239	Shiga	242,553	1,069,069
Miye	493,511	1,596,377	Kagoshima .	415,525	2,067,409

Export of Tea

The depression of Japan's tea trade of late is attracting serious attention both of the authorities and exporters. The value and quantity of export in 1917 broke the previous record, followed, however, by an adverse turn, till 1920 when the total came to only ¥17 millions. In comparison even with the pre-war year 1914 when the market price was only 48 sen per "kin" against 87 sen quoted in 1928, there is an alarming fall of 9,773,247 "kin."

	1927		1926		1925	
	Quantity (in picul)	Value (Yen)	Quantity (in picul)	Value (Yen)	Quantity (in picul)	Value (Yen)
Green tea ..	170,360	10,773,123	170,998	11,914,780	180,097	14,029,907
Oolong tea..	28	2,189	32	2,477	13	1,634
Brick tea...	—	—	3	80	1,147	22,703
Others	5,765	121,332	8,703	194,525	29,052	708,540
Total	176,153	10,896,644	179,736	12,111,862	210,309	14,762,784

The average figures of production and exports for each 5 years since 1898 are shown below:

	Production (in 1,000 kin)	Exports	
		Quantity (1,000 kin)	Value (Yen 1,000)
1893-97	51,372	35,737	7,748
1898-02	46,708	32,761	9,017
1903-07	43,614	32,330	12,147
1908-12	51,737	20,485	13,339
1913-17	59,134	35,525	15,205
1918-22	61,427	22,871	18,823
1923-27	—	19,014	13,313
1927	—	17,613	10,896

CHAPTER XXX

FORESTRY

INTRODUCTORY REMARKS

Forests in Japan proper, i.e. excluding Chosen, Karafuto and Taiwan, occupy roughly 48% of the total area as against 53% in Sweden, the best wooded country in Europe. If these overseas territories are taken into account percentage will come up to 65. Classified according to ownership, forests may be divided into those belonging to the State, the Crown, communal bodies, temples and shrines and private individuals. As regards their uses there are two classes, utilization forests and preserves. (Statistics given later.)

Trees grow unusually well in Japan, favored as they are by a temperate climate with a plentiful supply of moisture. Over 1,000 species are represented, many of which make excellent timber. Both latitudinally and longitudinally the arboreal flora present great variation, owing to peculiar geographical formation of the land that extends over many degrees of latitude from north to south and also to the presence of high mountain chains, these naturally resulting in the diversity of climate and soils. Forests in Japan may be broadly divided into four zones.

Tropical Zone.—This zone covers the plains of Taiwan, Ogasawara Islands, and the southern half of Okinawa (Luchu), with a mean temperature of about 21° C. The representative trees are "ako" (*Ficus wightiana*, var. *japonica*), "takonoki" (*Pandanus odoratissimus* L.) etc. Bamboos attain a perfect growth in this zone.

Subtropical Zone.—Forests in this zone are found in the northern half of Okinawa, the high lands of Taiwan, Shikoku, Kyushu, and the southern half of Honshu as far as latitude 35° N., the mean temperature ranging from 13° to 21° C. The representative trees in this zone may be divided into broad-leaved evergreens, conifers and broad-leaved deciduous trees. In the first group there are "kusu" or camphor trees (*Cinnamomum camphora*), "kashi" (*Quercus acuta*) and "shi-i" (*Passania cupidata*); in the second several species of pines, and in the last group, "kunugi" (*Quercus serrata*), "konara" (*Q. glandulifera* Bl.), etc.

Temperate Zone.—The forests extend over the northern part of Honshu and as far as south-western section of Hokkaido corresponding to 43½° N., the mean temperature ranging from 6° to 13° C. The forests in this zone are economically the most important in Japan and are generally found in the mountain ranges that divide the Main Island—the Inner Japan section on the Japan Sea and the Outer Japan section on the Pacific. Valuable among the conifers are "sugi" (*Cryptomeria japonica* Don.), "hinoki" (*Chamaecyparis obtusa*), "sawara" (*Chamaecyparis pisifera* S. et Z.), "hiba" (*Thujopsis dolabrata* S. et Z.), "tsuga"

(*Tsuga Sieboldi* Carr), "momí" (*Abies firma* S. et Z.), several species of pine, etc. As deciduous trees of value there are "keyaki" (*Obelicea serrata* Makino), "buna" (*Fagus sylvatica* var. *Sieboldi*), "katsura" (*Cercidiphyllum japonicum*), several species of *Quercus*, chestnut trees, maples, fig-trees, magnolia, etc.

Frigid Zone.—Forests found at an elevation of 4,000 or 5,000 feet (above sea level) in Honshu, the northeastern part of Hokkaido, and Karafuto and Chishima (Kuriles) form the frigid forests. The principal trees are "shirabe" (*Abies Veitchii*), "todomatsu" (*Abies Sachalinensis*), "ezo-matsu" (*Picea ajaensis*), "shikotan-matsu" (*Larix Kurilensis*, chiefly in Karafuto), and lastly "hai-matsu" (*Pinus punila*) or creeping-pines that grow on the summits of high mountains in Honshu.

Though not more than thirty years have passed since forestry and dendrological research was placed on a practical basis, creditable progress has been made in all directions. Afforestation and economic adjustment is now receiving close attention. Of the famous wooded districts in Japan proper those of artificial origin are Yoshino (Yamato), Tenryu (Shizuoka-ken) and Owashi (Wakayama-ken) while of natural forests there are Kiso (Nagano-ken), Nagasawa, Tsugaru, etc., as mentioned later.

AREA OF FORESTS

Forests are divided by usage into three classes, i.e. 1, Protection forests, 2, Utilization forests, and 3, Percentage forests, the last of these being the State forests which are left under the control of villages or towns which are allowed in return a certain percentage of the produce. These forests are gradually converted into communal forests. The forests in Japan proper and colonies may be broadly classified as follows (1 cho=2.45 acres):—

Japan	Crown	State	Public	Temple	Private	Total incl. others
Proper						
(in cho)	1,375,930	7,755,107	4,328,781	132,298	9,623,103	23,215,220
Formosa						
(in ko)	—	2,445,211	—	—	183,059	2,635,452
Korea						
(in cho)	9,356,000	—	—	—	6,527,000	15,883,000
Karafuto						
(in cho)	—	*1,877,000	—	—	—	1,877,000

* Estimate based on the investigation of Military Land Survey Dep't.

Note:—The public forests and wild lands in Korea contain only the prefectural forests and school forests. The forests possessed by shrines and temples are included in those of private possession.

The area of principal protection forests as existing in Japan proper is as follows (in cho):—

	1926	1925
Against denudation of soil.....	836,061	820,871
„ winds	32,869	32,848
Head-water of rivers.....	902,452	898,413
For attracting fish.....	42,547	42,250
„ scenery	31,093	30,640

Important Forests in Japan

Of the important forests in Japan those that are of natural or artificial origin are as follows, to mention only a few that are specially valuable.

Forests Artificially Planted

Forests in Yoshino covering about 82,000 cho or 200,900 acres are well known for their splendid stock of "sugi" (*Cryptomeria Japonica* Don.) and "hinoki" (*Chamaecyparis obtusa* S. et Z.) yielding annually about ¥6,500,000 worth of timber valued for building and making casks of sake. Next important forests are the planted area along the river Tenryu and covering 543,000 cho, timber trees grown being principally "sugi" and "hinoki." The annual yield is estimated at ¥1,500,000. Bamboo groves grown near Kyoto are known as most valuable in Japan, yielding yearly about ¥2 millions worth of product of diverse utilities.

Forests Naturally Grown

The Crown forests of Kiso covering over 100,000 cho or 245,000 acres and with the growing stock of 6.6 million koku or about 66,000,000 cubic ft. (1 koku=about 10 cubic ft.) stand first on the list of largest natural forests in Japan. It belonged to the Lord of Owari before the Restoration and the five species "hiba" (*Thujopsis dolabrata* S. et Z.), "sawara" (*Chamaecyparis obtusa* S. et Z.), "nezuko" (*Thuja japonica* Maxim) and "koyamaki" (*Cidopytis verticillata* S. et Z.) were jealousy preserved as protected trees. Of the five species "hinoki" is most important as to volume and value.

The State forests of "hiba" in Aomori cover some 190,000 cho and in sylvan grandeur are only equalled by the other well-known pure forests of "sugi" in Akita also belonging to the State. The "sugi" zone extends along the banks of the rivers Noshiro and Omono and measures 43,000 cho in area. The three mentioned above are regarded as the most valuable natural forests in Japan. Others that are worthy of notice are the State "sugi" forests in Tosa about 30,000 cho, deciduous-leaved forests around Lake Towada famous for its splendid scenery, mixed forests in the Japanese Alps region and in the southern part of Kyushu, the "sugi" forest on island Yakushima of the Osumi archipelago, Kyushu. Hokkaido supplies about 30 million koku or 300 mil. cubic ft. of timber from its coniferous, deciduous and mixed forests. Karafuto abounds in coniferous forests of *Abies*, *Picea* and *Larix* which supply material to the pulp mills run in the island, while the Arisan range in Taiwan is famous for its mixed forests as the northern region of Korea for stock of conifers. Though covering only less than 300 acres Mt. Tachibana not far from the city of Fukuoka is noted as the only large forest of camphor trees in Japan proper, many of them being over 100 years old.

Adjustment of State Forests

The program for adjusting State forests aims at, as ordained by law in 1899, to determine, out of the forests and plains belonging to the State, those that are to be preserved for the benefit

of public order and for conducting economic plan. The Forest Fund Special Account System that was in force from 1899 to 1921 laid the adjustment plan on firm basis. Thanks to that system the Government could complete with the fund realized from sale of unnecessary State forests and plains the work of surveying, delimitation, afforestation of blank spaces, experimental planting, etc. Since the year 1922-23 the adjustment and working expenses have been met out of the regular Budget.

According to the working plan adopted for adjustment and utilization 416,000 cho of State forests and plains in Japan proper is to be set apart as necessary and 17,000 cho is to be disposed of as superfluous area. The definite plan of utilization has been arranged for over 4 million cho consisting of 3,690,000 cho wooded forests and plains and 390,000 cho to be reserved from various considerations. The wooded surface is estimated to hold growing stock amounting to 1,406,240,000 koku of which conifers claim 28% and deciduous trees 72%. The stock per cho or 2.45 acres work out to 344 koku. At present the annual cutting area is about 40,900 cho with the conversion volume of 19,340,000 koku. With the exploitation of the area left unutilized and the growth of the artificially regenerated spaces representing 653,000 cho, the conversion volume is expected to make a far better showing.

The financial results of the State forestry administration are shown below:—

Year	Revenue	Expense	Net profit	Profit per cho
1921-23 (Average) ..	32,350,000	15,430,000	16,920,000	3.96
1926-27	32,659,601	19,341,631	13,317,970	3.11

River Control and Afforestation Work.—The private-owned forests as distinguished from the State are divided into individual and communal ownership. The latter consists in about equal proportion the property of civic corporations and the hamlets composing them. The hamlet land is generally left in the state of utter neglect. It was with the object of renovating and utilizing the barren area that the Government elaborated in 1912 for the communal forests and plains the river control work spread over 23 years, it being intended to plant bare spaces of 350,000 cho and to adjust the communal land for best economic purposes. Small aid is granted for encouraging the work. Then the Government is also promoting the planting work of about 330,000 cho of blank area belonging to the communal bodies, the work to be completed in 19 years beginning 1920. The contract arranged between the Government and the communities concerned is that the latter to offer the land and undertake some slight work of control and protection, while the Government attends to planting, cutting and other necessary business at its own expense. The profit realized is to be shared half and half by the contracting parties.

FINANCIAL ASPECTS

Yield of Forests for the Year 1926 (in ¥1,000)

	Timber	Fagots	Total
Crown	7,316	470	7,786
State	17,567	4,254	21,821

Communal	7,315	5,995	13,310
Temple	610	222	832
Private	85,172	60,691	145,863
Total incl. others.....	117,979	71,873	189,852

The rate must become much less when the disbursements are taken into account, but this calculation is hardly possible for private forests, as many of their owners do not generally keep exact account of labor spent and expenses paid. Much more precise calculation is shown for State forests for which the account is necessarily kept with great strictness. The data for the last few years are these, excluding Hokkaido (in ¥1,000):

Year ended March	Receipts	Expenses	Balance
1923	36,672	20,089	16,583
1924	37,557	18,383	19,174
1925	37,153	16,602	20,551
1926	32,660	19,405	13,255

The rate of profit is comparatively small in view of the fact that the State forests are in many places disadvantageously situated as to accessibility, while the relatively large outlay on account of planting blank areas also tells against the revenue.

Principal Timbers

The forest yield of principal timbers in Japan proper was returned as follows for the year 1928 (1 koku=10 cubic ft.):—

Coniferous	Kinds of trees	Quantity felled 1,000 koku	Value 1,000 Yen
	Sugi (<i>Cryptomeria japonica</i>).....	12,066	47,719
	Hinoki (<i>Chamaecyparis obtusa</i>)..	1,724	11,028
	Pine	10,713	27,087
	Larch	415	899
	Sawara (<i>Chamaecyparis pisifera</i>)	252	1,184
	Hiba (<i>Thujopsis dolabrata</i>).....	876	1,378
	Momi (Fir)	1,355	2,233
	Tsuga (<i>Tsuga sieboldii</i>).....	1,205	1,524
	Ezomatsu, todomatsu (Silver fir).	8,059	8,874
	Total incl. others.....	36,982	102,649
Broad-leaved			
	Camphor	95	326
	Keyaki (<i>Obeliscoa serrata</i>).....	155	948
	Kashi (<i>Quercus acuta</i>).....	297	887
	Shioji	1,035	1,333
	Chestnuts	936	2,435
	Nara (<i>Quercus glandulifera</i>).....	2,173	2,995
	Kashiwa (<i>Quercus dentata</i>).....	138	219
	Beech	527	312
	Kiri (<i>Paulownia</i>)	210	2,005
	Total incl. others.....	8,469	15,331
	Grand total	45,450	117,979
	Do. for 1925.....	42,869	125,975

Of the total production the Crown forests contributed 3,829,953 koku (¥7,315,687); the State, 12,538,268 koku (¥17,566,872);

the communal, 4,180,851 koku (¥7,315,135); the temple, 134,032 koku (¥609,872); and the private, 24,767,376 koku (¥85,171,687).

Against the above-mentioned volume cut, the number of trees newly planted during 1926 totalled 342,286,876 (total plantation area 103,188 cho), consisting of 306,720,772 (92,295 cho) of conifers and 26,764,030 (7,812 cho) of broad-leaved species. Besides there were 41,859,301 conifers and 4,609,002 broad-leaved trees planted by way of replenishment.

Yield of bamboo reached 5,320,606 bundles or ¥6,330,048 in value. Fagots that form important items in forest economy chiefly consist of pines, abies, "kunugi," etc., these valued at ¥71,872,968.

Principal By-Products in 1926 (in ¥1,000)

Seeds	77	Dried mushrooms	
Fruits	3,638	(Shiitake)	2,972
Barks	3,078	Pine black	2
Under-grown grasses	15,743	Acetic acid coal.....	87
Vines & ferns.....	157	Charcoal	100,736
Galls	101	Total incl. others...	135,947
Raw mushrooms ...	3,648		

SUPPLY AND DEMAND OF TIMBERS

Use of Principal Timber Trees

Of the coniferous trees mentioned above "ezo-matsu," "todo-matsu," and "momi" are pulp-wood, while all the rest are valuable building timbers. The broad-leaved trees are used for industrial purposes, though the *Castania* is also extensively consumed as railway sleepers. The position of "kiri," one of the highest and softest woods, is specially important. It is used extensively in cabinet-work, making clogs, etc.

CAMPHOR

Of the world's consumption of this article put at about 12 million "kin" per annum, the bulk is supplied by Japan and Formosa. After the Russo-Japan War the sale remained long on 8 mil. kin level, to jump to 10 mil. level during the World War. Then the world-wide economic dislocation and oversupply seriously affected the market, so that in 1921 consumption fell to only 2,800,000 kin. Restricted output gradually revived the business and in 1927-28 sale rose to 7½ mil. kin. One thing that darkens the future of natural camphor is the appearance of synthetic camphor originated by Schelling Co., Germany.

In Japan Proper.—Camphor trees growing in State and Crown forests are estimated at 12 millions to yield about 210,000 "shakujime" or about 2,520,000 cubic ft. (1 shakujime=about 12 cubic ft.) of ripe timber, but as these trees are not always found in easily accessible places and their conversion will not pay at ordinary market rate, the Government has recently been earnest-

ly encouraging the planting of young trees in more convenient places and to convert them after several years' growth. Eight provinces in Southern Japan are granted a small aid. The area under camphor trees in Japan proper is about 2,000 acres, Hyogo prefecture being the refining centre.

Formosa.—In Formosa the trees of not less than a century old are estimated to yield about 2½ million "shakujime" producing 32,000,000 kin of camphor and 23,360,000 kin of oil. As the tree must be over 60 years old before it yields a maximum percentage of camphor, the supply of the trees may be exhausted in a few decades unless judiciously managed. Suggested by that consideration, in 1918 the Formosan Government expanded the original plan of planting young camphor trees over the area of 20,000 cho between 1900 and 1924, to one of 55,000 cho to be completed by 1929. The plantation of 1,500-5,000 cho is to be made according to the new program, which, on its consummation, will supply every year 8 million kin of crude camphor.

SAWING BUSINESS AND WOOD INDUSTRY

Government and Private Yards

The Government some years ago started on its own account wood-conversion enterprise, whereas formerly it confined itself to selling trees growing in State forests as they stood. At one time Government conversion works numbered 10 but they have all been discontinued.

At the end of 1926, 759 lumber companies existed with ¥80,183,172 capital, of which 373 were joint stock cos. with ¥68,588,250. Lumber yards belonging either to those companies or private individuals numbered 1,855 with 26,704 employees.

Principal Wood Industry

Since the European war investment in forestry business and products has made a credible growth, especially the sawing business, match-sticks and forest-planting; yet on the whole the financial result in this particular line can by no means be regarded as satisfactory, considering the high percentage which wooded areas occupy in the country.

Pulp.—The wood pulp industry in Japan was represented by 500,301 tons in 1926 to increase to 621,887 in '27. The wood consumed for this purpose comprises firs, pines, "tsuge," etc. supplied from forests in Japan proper, Karafuto, Siberia and Korea. The volume converted amounted to 5,672,960 koku in 1925 and about 7,400,000 koku in 1926. Of the latest statistics of paper industry the figures for the supply and demand of wood pulp are as follows (in ton):

Year	Product	Import	Export	Consumed
1924	357,084	59,553	68*	416,633
1925	414,706	77,440	9*	492,146
1926	500,301	63,151	—	563,452

* in piculs.

Match-sticks.—The export of match-sticks formerly stood at about ¥3 million level, but the figures fell to ¥1,396,353 in 1925 and then to ¥1,251,917 in '26. The stock of poplar used for this industry being now scarce the supply is met with the Siberian produce.

Other smaller items are the pencil industry which has sunk into an almost insignificant position, chess-board business, toy-making, cork and acetic acid manufacturing, to mention those of recent origin.

Inflow of Foreign Timbers

Apart from wood pulp and other materials already referred to the inflow of foreign timbers has been quite conspicuous in recent years, especially since the earthquake disaster of 1923, their arrivals in 1924 being valued at over ¥119 millions. The bulk of the imports consists of the American goods which amounted to 9,896,303 koku (98,963,030 cubic ft.), the figure comprising the Canadian timbers and representing only pines, firs and cedars. Other American materials imported are spruce and hemlock, but pines take the largest percentage and are replacing the native growth as building timber, being cheaper by 30 to 70½ than the Japanese produce according to the length, though they are regarded as being inferior to the native pines as building materials and less valued by carpenters and architects.

The import in 1925 fell to ¥76,729,000, pines, firs and cedars contributing ¥69,940,000. In 1926 the figures again increased to ¥104,126,000 including ¥95,817,000 of pine, fir and cedar. The import of American and Canadian goods which occupies 78 to 88 per cent. of the total imports annually, reached in 1926 about 92 per cent. of the total imports. The heavy inflow in 1924 and 1926 despite the dull business on the market here is explained by an abundant supply and the lowered freightage for the goods in America, as well as the increase of demand in this country with the progress of the post-quake reconstruction work in the quake-stricken zones and the growth of importation in anticipation of the proposed increase of the custom duty on imported goods as a measure for the protection of the native produce.

The following table shows the figures of foreign timbers imported during the 5 years ending 1926:

	America (including Canada, koku	China & Manchuria koku	Maritime Provinces koku	Total including others koku	Total value Yen
1922	6,144,115	258,529	1,867,746	8,273,112	74,706,976
1923	6,257,585	159,535	1,269,209	8,275,896	83,829,085
1924	9,896,303	97,508	1,248,600	11,292,533	119,392,707
1925	5,978,030	1,562	849,071	6,886,935	76,729,000
1926	9,011,399	843	693,641	9,729,406	104,126,000

(1 koku=10 cubic ft.)

The imports in 1927 at the port of Yokohama alone amounted to 5,051,953 "koku" (or 606,234,439 B.M.) against 4,700,122 "koku" in 1926. There was also in the first half of the current year a heavy arrival of as much as 4,069,118 "koku," a gain of nearly 1 million over 3,142,076 "koku" of the same period of 1927, the progress of reconstruction work in Tokyo and Yokohama as well

as speculative imports in view of the proposed advance of import duty on the goods accounting for this increase.

GAME LAWS

Formerly no regular rules existed for the protection of useful birds. The crane was then the only protected bird, chiefly from curiosity. Since then about 200 species of birds were either placed under absolute protection or protected during the season of laying. In September 1919 the old game act was superseded by a new and revised one that was passed by the 40th session of the Diet. Instead of specifying protected birds the new law singles out 47 species of birds and kinds of beasts as regular game open to sportsmen, although protection is given to some of them for a limited period. The shooting season extends from Oct. 15 to Apr. 15 the following year. For scientific and other special purposes forbidden game may be captured or killed with the special permission of the Minister of Agriculture and Forestry. Permission to hunt in forbidden areas and season must be applied for.

Shooting licenses are of two classes; A is issued to those who use firearms while B is issued to those who adopt other methods of killing or capturing game. Each is of 3 grades classified according to property and income of the applicant, the fees ranging between ¥45 and 5. The lowest limit is allowed only to professional hunters. Game preserves such as exist in the West are few and far between. There are only about 40 common game preserves which have come down from the old regime. The principal game birds are wild duck, pheasant, grouse, snipe, brown-ear, bulbul, dusky ouzel, etc. It should be noted that damage inflicted on crops by insects is roughly estimated at 10 million yen a year.

Birds and Beast of Game

Birds.—Aisa, Atori, Ahodori, Aosagi (heron), Aoji, Ikaru, Isuka (crossbill), U (cormorant), Uso (bullfinch), Uzura (quail), Kakesu (jay), Kashiradaka, Kawarahiwa (gold finch), Kamo (wild duck), Karasu (crow), Gan (wild goose), Kiji (pheasant), Kuina (moor-hen), Kumadaka (hawk), Kuroji, Kerl, Golsagi (night-heron), Shigi (snipe), Shime (common hawkfinch), Shirohara, Suzume (sparrow), Daizen, Chidori (plover), Tsugumi (dusky ouzel), Nyunai-suzume, Nojiko, Hakucho (swan), Hato (dove), Hayabusa (peregrine falcon), Ban (grouse), Hiyodori (brown-ear), Hiwa (siskin), Hojiro (bunting), Mashiko, Mami-chajinai, Misago (eaglefisher), Miyama-hojiro, *Munaguro, *Yamadori (copper pheasant), Washi (eagle), Ezoyamadori, Oshidori (mandarin duck).

Note—Those marked * are protected for 3 months, from March to October.

Beasts.—Badger, weasel, otter, antelope, fox, deer, sable, flying squirrel, and squirrel are protected for 9 months from March to November.

CHAPTER XXXI

FISHERY

INTRODUCTORY REMARKS

With a coast line of more than 18,000 miles, exclusive of Chosen and Karafuto, it is not to be wondered at that fishing has reached a high standard of development in Japan, as fish has been from old times one of our staple articles of food. There are two factors that deserve mention in this respect, as they specially favor the multiplication of fish in Japanese waters whether migratory or stationary, living in deep waters or inshore. The first is that the Japanese dominions extend over several degrees of latitude, from the arctic circle to the tropics, and the other, that the coast is washed by the warm Kuroshio current on the one side and by the cold Oyashio on the other. In such favorable circumstances inshore fishing has made remarkable progress. As an instance may be mentioned the stretching of nets inshore to catch migratory fish by cleverly taking advantage of the configuration of the coast. Then the splitting up of the country in former times into a large number of rival feudal dominions has brought into existence sundry ingenious fishing tools and implements, their kinds being too numerous to be counted. Perhaps in this respect Japanese fishing is unique in the world.

As regards pelagic fishing, the most important since the prohibition of sealing is line-fishing for cod. The seine fishing for bonito and tunny also promises to grow in importance. Then there is whaling (see special paragraph given later. Ed. J.Y.B.) which has made marked development since the introduction of the Norwegian method. Of late ground net fishing by motor-boats has come in vogue, boats of this type numbering about 13,000 as against ordinary craft returned at 344,107. The greater use of more effective steam-trawlers (mentioned later on) in place of simple native boats has been a notable feature recently.

In marine products, besides those for home consumption there are several items that figure on the export list; those going to China are chiefly articles for table use, while fish oil, iodine from the sea-weeds, isinglass, corals, etc., are exported to Europe and America. Salt refining as extracted from brine has been from ancient times an important industry along the shores bordering on the Inland Sea. With the enforcement of the Salt Monopoly Law the districts open to the business have been restricted. Aquatic culture has been known from olden times in Japan, especially in the form of pond-culture of gold fish and carp and fagot-culture of oysters and the edible sea-weed laver. Coming to more recent years the artificial rearing of snapping-turtles, eels, salmonidae and some shellfish has made great development. Oyster-culture on the French plan is becoming popular in some

parts of the country. With respect to the relative activities of this particular branch of fishing, salmon culture is especially noticeable in the rivers of Hokkaido and northern Japan, trout in the mountain lakes of northern Japan, carp, eel and snapping-turtle in southern Japan.

In 1925 there were 119,777 culture grounds that covered about 139,690 acres and yielded the catches valued at over ¥17 millions. The lakes at Nikko and Hakone, Shikotsu Lake in Hokkaido and Towada Lake in Aomori are noted for trout sport.

The administrative side of the industry is fairly complete. Under the Fishery Law, which provides for protection and propagation of fish and control of fishermen, the prefectural governors are empowered to give orders regarding restriction or prohibition in the catching of fish, sale of manufactures, fishing tools and boats, the number of fishermen, etc. For the promotion of the industry legislation has lately been made in regard to aquatic products associations (Suisan-kai). These are of two kinds, namely, the Municipal and the Prefectural, which are systematically organized and unified by one central institution, the National Aquatic Products Association. Besides, there are 3,791 fishery guilds with aggregate membership of 476,675, and 61 aquatic products guilds with 78,028 members in total.

On the economic side, the principal kinds of fish and shell-fish that are used as articles of food are, in the central and southern districts of Japan proper, pagrus, bonito, sardine, horse mackerel, tunny, oyster, clam, prawns, lobsters, etc. in the northern districts, herring, cod, salmonidae, crab, laminaria, and over the whole country tunny, flat-fish, yellow-tail, etc. For industrial use there are coral, the isinglass weed, the starch weed, etc. Marine products for export have found good customers in China for many years past, where dried cuttlefish, sea cucumber, ear-shell, sharks' fins, laminaria, isinglass, etc. are much in demand. Products going to other markets are canned salmon, trout, sardine, crab, prawns, preserved cod and mackerel, fish oils, potassium iodide from sea-weed, coral, shell-buttons, etc.

Encouragement of Pelagic Fishery

With a view to encouraging pelagic fishery, a small amount of bounty is granted to owners of fishing craft of approved standard as to type, etc., under the provisions of the Pelagic Fishery Encouragement Law first promulgated in 1905 and partially revised in 1925. The rate of bounty is ¥60 or less per ton of iron or steel bottom and ¥45 or less per ton of wood bottom, ¥22 or less per horse power of steam engine and ¥40 per horse power of motor engine, etc. For vessels exceeding 60 tons a bounty corresponding to 2/10 or less of the estimate cost of the hull, engines, equipments, etc., may be granted irrespective of the above specifications. The State aid is granted on fishery using drag-net and drift-line and on bonito-fishing.

The Minister of State concerned is authorised to grant on owners of fishing boats newly built or rebuilt according to the approved plan a subsidy or bounty not exceeding 1/3 of the cost involved in their construction or reconstruction. The same Minister may also grant, if deemed necessary, on corporations or

other juridical persons not aiming at profit-taking the whole or portion of the funds required for training the crews of fishing boats, or for promoting the interests of those engaged in pelagic fishery or fishing in foreign waters.

Position of Aquatic Products as Classified in Recent Years

The following is the authentic statistics showing the value of various aquatic products and the percentage of their output in recent years:—

	1924 (Yen 1,000)	1919 (Yen 1,000)	1925 (Yen 1,000)	1926 (Yen 1,000)
Coastwise fishery {	95,054	246,834	258,449	227,292
	¥52	¥46	¥44	¥41
Deep sea fishery {	5,860	27,524	72,284	85,435
	¥3	¥15	¥12	¥15
Aquiculture..... {	4,087	11,591	18,184	17,282
	¥2	¥2	¥3	¥3
Manufactured marine products {	52,174	164,378	202,036	183,204
	¥29	¥31	¥35	¥33
Salt..... {	11,904	30,080	34,608	31,785
	¥7	¥6	¥6	¥5
Total..... {	181,483	532,254	585,561	544,998
	¥100	¥100	¥100	¥100

The figures as to salt are based on the statistics of the Govt. Monopoly Bureau, the rest taken from that compiled by the Fishery Bureau, Dept. of Agr. & Forestry.

Fishing Population and Boats

Permanent Fishermen and Occasional Fishermen

Fishing			Aquiculture		
Year	p. f.	o. f.	Year	p. f.	o. f.
1924	616,651	498,829	1924	6,789	68,851
1925	620,081	496,484	1925	8,214	64,303
1926	630,171	482,264	1926	9,409	93,149

Manufacturing			Total		
Year	p. f.	o. f.	Year	p. f.	o. f.
1924	89,484	134,900	1924	712,924	698,580
1925	94,641	140,977	1925	722,936	701,764
1926	101,142	134,905	1926	740,722	710,318

N.B.—The above figures cover both employers and employees.

Fishing Craft

	Without engines	With engines	Total
1925	344,107	12,813	356,920
1926	335,031	15,912	350,943

THE ECONOMIC POSITION OF FISHERY

Catches and Marine Products

Principal Catches

Catches	1920 Yen 1,000	1921 Yen 1,000	1924 Yen 1,000	1925 Yen 1,000
Fish	169,501	190,178	191,864	182,437
Shell fish	11,848	12,656	10,681	9,408
Other aquatic ani- mals	30,398	39,637	36,228	44,019
Sea-weeds	15,546	15,977	16,168	15,224
Total	227,292	258,449	254,941	151,089
Marine products				
Foods	148,843	163,670	150,427	153,772
Manure	29,880	33,530	28,065	26,837
Fish oil	3,422	3,992	3,584	2,009
Glue	1,058	844	1,562	1,412
Total	183,204	202,036	183,638	184,031

	1924		1925	
	1,000 kwan	Yen 1,000	1,000 kwan	1,000 Yen
Herring	146,825	17,136	125,517	14,931
Sardine and anchovy.	125,977	26,992	145,866	30,820
Benito	3,930	4,605	4,601	8,535
Mackerel	14,180	8,412	17,310	11,065
Tunny	4,511	6,307	3,902	8,599
Yellow tail	7,658	12,901	5,917	667
"Tai" (Pagrus)	4,282	15,257	5,300	19,814
Salmon	3,973	5,193	3,659	5,498
Carp	352	967	456	1,433
Eel	825	3,469	864	3,890
Total incl. others...	417,377	169,501	—	190,178

Principal Marine Products (¥1,000)

	1924	1925
Dried bonito	22,362	25,712
Dried cuttle-fish	14,359	19,540
Herring manure	11,664	13,333
„ dried	4,285	3,439
Sardine, salted & dried.....	4,224	3,707
Anchovy, dried	616	1,039
Anchovy, salted & dried.....	—	433
Prawn, boiled & dried.....	1,567	2,924
Sardine, boiled & dried.....	12,001	12,585
Code, dried	810	1,058
Total incl. others.....	183,204	202,036

EXPORT OF FISH AND MARINE PRODUCTS

Marine products, fishes cured in cans or bottles, and fish and whale-oils, figure on the customs report as follows (in value of ¥1,000):—

FISHERY

325

I Marine Products:	1927	1926	1925
Salt	3	6	4
Sea-weeds	3,268	4,276	3,579
Fresh fish	769	728	997
Cuttle, dried	5,168	7,029	7,271
Ligaments of scallops.....	2,146	2,164	2,517
Trout	427	563	298
Total incl. others.....	20,146	22,669	22,650
II Canned or in bottles.....	19,509	15,938	11,376
III Fish and whale oil.....	7,480	4,486	4,127

Of canned articles crabs are especially prominent representing ¥14,661,390 in 1927, the other items being (in ¥1,000), abalones 617, salmon 1,803, fish & shell-fish 1,174 in 1927.

AQUICULTURE

(in ¥1,000)

Year	Oyster	Carp	Eel	Mussels	Total incl. others.
1924	926	2,938	3,138	632	17,652
1925	976	3,029	2,635	941	18,184
1926	931	3,195	2,573	891	17,281

Pearl Fishery.—Mr. Mikimoto's artificial hatching at Toba of pearl-oysters according to a patented process deserves mention, this being one of the most important hatcheries in Japan and elsewhere. In principle it is identical with that in natural pearl-formation, consisting as it does of putting into the oyster-shell when it is three years old a foreign substance which it incapsulates with the beautiful secretion. After keeping it for four years the shells are taken out. Mikimoto's oyster bed is in the Bay of Ago near Toba (Shima) and extends 20 nautical miles.

The objection often raised abroad against the culture pearls has been completely refuted by some distinguished biologists of England, France and Germany. After exhaustive researches in 1921 they declared that the "culture" pearl is a real pearl in every respect. Then in 1924 the Paris Court declared that "the Japanese culture pearls produced by scientific stimulation of the oyster are in no sense false or imitation pearls, and they can be sold as real pearls without any indication of their origin."

The Bay of Omura, near Nagasaki, was formerly a noted centre of natural pearl, and at present both natural and culture-pearl industry is extensively conducted by the Omura Bay Pearl Co.

Fishery in Hokkaido

Hokkaido is widely reputed as one of the three important fishing grounds in the world both on account of deep-sea and coast fishery. During the three years from 1924 to '26 catches and marine products amounted in value to ¥108,190,946, ¥123,289,333 and ¥104,108,886 respectively, the average of ¥111,863,038 corresponding to about ¥44.9 per capita of the total population of the insular territory. Principal catches are herring, salmonidae, cod, sardine, flat-fish, etc., in the sea around the island, and as regards shell-fish and sea-weeds, cuttle-fish,

octopus, crabs, scallop, laminaria, etc. Herrings stand foremost in value, contributing about ¥17,108,093. Licensed grounds number over 11,000, fishing vessels and fishing men registering 58,603 and 182,509 respectively, the figures being for 1926.

The total catches in 1926 amounted in value to ¥50,114,155, the average of ¥1,210 per capita of the total fishing population. The figure is a decrease of ¥4,952,885 compared with the previous year, the falling-off being ascribed chiefly to a decrease in the yield of marine products other than fishes. Fishes contributed 73%, shell-fishes 7%, other marine products 11% and sea-weeds, etc. 9% of the total amount. Of fishes, herrings as usual lead all others in value, contributing ¥17,108,093, which is 47% of the total value of catches and 34% of the total value of marine products.

Pelagic Fishing and Whaling

Before the advent of the bounty arrangement, deep-sea fishing vessels (at first sealers only) numbered nine with 531 tons reporting only ¥77,000 catches, but the corresponding figures have grown to 7,024 motored boats and 754 open boats with 127,131 tons as in 1926, the value of catches being tabulated below:—

Deep Sea Catches

(In Japan Proper for 1926)

	Open Boats		Motor Boats		Total Catch Yen 1,000
	No. Boats	Tons	No. Boats	Tons	
Circle net	126	934	342	4 606	5,456
Deep-Sea net	37	327	1,981	40 747	25 094
Drift	232	1,576	840	15 648	8,512
Long line	245	1,685	1,872	26 235	17,883
Hand	37	205	343	2 836	3,030
Bonito angling	5	35	1,355	28 823	21,562
Others	72	434	291	3 041	3,890
Total including others.	754	5,196	7,024	121 035	85,435
Total for 1924.....	799	4,955	6,030	98 887	58,088
Total for 1925.....	562	3,934	6,653	109,299	72,284

Besides, in 1925 the whales caught amounted to ¥1,353,290 in value.

Trawling.—This method of fishery is under control of the Government which, to check suicidal competition and overcatching, limits the number of trawlers to 70 only. The limit has already been reached. The principal fishing grounds are the Eastern China Sea and the Yellow Sea, the ports of Shimonoseki, Hakata, and Nagasaki being bases for the boats. Sea breams, *Sciaena schlegelii*, *holocephali*, turbot, etc. are principal fishes caught, the value of the catch for 1926 totalling ¥9,077,099.

Whaling.—The noted whaling grounds along the coast of Japan are the sea off Kinkazan Island (in summer) as far south as the mouth of the Tokyo Bay, also the sea off Kishu, Tosa, Nagato and Kyushu (all in winter). Russian whalers in the Korean field have been completely superseded by their Japanese rivals

since 1914-5 war. The Kuriles also supplies a good ground.

The cetaceans are protected by the Government Ordinance enforced in 1919 which allows whaling only to licensed persons, the permit being effective for five years. The number of ships is limited to 30. A fine not exceeding ¥100 besides confiscation of the apparatuses, etc. is imposed for violation of the provisions. The whales caught in 1926-7 both in Japan proper and the territories amounted to 1,868 in number representing ¥2,116,877.

FUR-ANIMALS & FOX-FARMING

In conformity with the treaty concluded in 1912 among Great Britain, Russia, U.S.A. and Japan for the protection of fur-seals and sea-otters, Japan promulgated in the next year regulations reserving their hunting until 1926 only to the government in the Kuriles north of Etrup. In the region thus kept under strict watch against poachers the animals have grown apace. The sea-otters which numbered 200 in 1912 multiplied, for instance, to 600 by 1924, while the record for fur-seals is far more striking, as follows:

	1912	1915	1918	1922	1924
Off-springs	2,476	2,376	4,497	6,134	9,613
Full-grown females...	2,476	2,376	4,497	6,134	9,613
Full-grown males ...	2,350	253	418	994	1,260
Total incl. others	9,041	6,455	12,140	15,748	28,226

Fox rearing in Hokkaido and Karafuto has been encouraged by the authorities since 1916. At the same time they themselves are conducting it as a by-undertaking to the work of protecting sea-otters and fur-seals.

Number of Private Ranches and Foxes Kept (1927)

Location	No. of ranches	No. of foxes
Hokkaido, Karafuto, Fukushima-ken..	46	2,300
Kuriles (govt. ranch).....	1	4,582
Total	47	6,882

The number of foxes kept at those ranches in 1924 as classified according to kinds was as follows:

Kinds of Foxes Kept (1924)

	Silver-black	Blue	Cross	Brilliant red	Common red	Total
Private ranches ..	623	300	206	9	306	1,444*
Gov't ranches	252	1,897	1,233	710	816	4,770
Total	875	2,197	1,439	719	1,122	6,214

* Includes one white.

The Taihoku Sangyo Kaisha (Otomari, Karafuto) is a leading establishment in this line and keep 520 silver-black foxes at present. The Onuma, Hokkai and Kita-nippon Kogyo Cos. also rear foxes in Hokkaido.

SALT INDUSTRY

Salt produced in Japan proper is extracted almost entirely from the brine and refined by means of artificial heating, though

in Formosa and Kwantung the natural heating system prevails. The districts bordering on the Inland Sea are the centre of production, which reached about 1,115 mil. catties in 1926-27. In the same period about 3,215,694 piculs were imported, the bulk from Taiwan, Kwantung and Tsingtao. Of some 13 mil. catties consumed in 1923 pickles, soy-brewing, etc. took about 9%, chemical industries 9%. With the restoration of Tsingtao to China the question of how to get regularly the supply of its cheap production has assumed a grave importance.

CORAL FISHERY

Pink, red and white corals are collected in the seas around Kyushu, the collection in 1925 being as follows (in ¥1,000):—

Kagoshima-ken	40	Nagasaki-ken	120
Kochi-ken	11	Total with others	235

The amount of collection in 1926 was returned as 6,495 kwan, valued at ¥1,038,700 (exclusive of Formosa).

Recently good coral beds have been discovered in the seas near Ogasawara and northern Formosa. The exports chiefly go to Italy.

JAPANESE FISHING ABROAD

Korean Seas.—These are the earliest field of exploitations by Japanese fishermen venturing from home, the progress that has been made in the Korean waters since the annexation being quite striking. At present more than 33,000 fishing craft manned by over 102,000 bold fishermen are engaged in utilizing the marine resources which the indolent and inexperienced natives left in neglect. The yearly catches amount to over ¥47,000,000. (Vide Chap. on Korea).

Russian Territory.—Japanese fishermen are allowed by virtue of the Portsmouth Treaty of Peace to carry on fishing along the coasts of the Maritime provinces, Kamchatka and Saghalien. The new fishery convention assuring the fishing rights of Japanese in the territory according to the Portsmouth Treaty was concluded and signed in Mar. '28, the pact to be renewed on the expiry of 8 year term. At present there are over 20,000 Japanese fishermen in the territory their catches amounting to 630,561 "koku" in 1926. The chief items are salmon, trout and herring. The cod and crab fishery is also promising. The fishing grounds include Kamchatka, the Sea of Okhotsk, Maritime Provinces and Kara-futo. Of all the 800 grounds 257 were being exploited by the Japanese in 1926-27.

Of the 5 cos. engaged in fishing and canning business in this

region, the Kamchatka Fishery and Yushutsu Shokuhin Cos. were amalgamated in 1921 with the Nichiro Gyogyo Co., the new concern commanding a capital of ¥17 millions (¥15,533,000 p.u.)

Canada.—Japanese fishing in the Skeener and Fraser rivers of Canada was started in 1888, the chief spoil being salmon. The enterprise has greatly developed since, and at present Japanese fishing-vessels licensed by the Canadian Government number over 200, their annual catches reaching several million yen in canned salmon alone.

California.—There are about 1,000 Japanese fishermen in California (Los Angeles, San Pedro, etc.) owning over 200 fishing vessels, mostly of the latest type. The catches are tunny, bonito, yellow-tail, saury-pike, sardine, etc., the bulk being taken by the local canning companies.

CHAPTER XXXII

MINES AND MINING

INTRODUCTORY REMARKS

Authentic records show that mining industry in Japan was already fairly well developed by the 6th century. The demand for metals increased rapidly for coinage and armor, the casting of Buddhist images and the decoration of Buddhist and Shinto temples. The mining of precious metals, copper, iron, etc. became especially active in the 15th century. It is recorded that from about 1414 Japan began to export annually to China a considerable quantity of copper for minting purposes, while the gradual growth of trade with Holland resulted in the increased export of gold, silver and copper to Europe. About 1700 Japan supplied annually to China and Holland as much as 4,880,000 "kin" of copper, that is, almost three times the quantity consumed in this country, and 15,000 "kan" of gold and silver. Such activity points to the conclusion that the metal veins in the country must have been very rich and easily workable.

The knowledge which our miners possessed in those days was necessarily primitive as regards both extraction and melting, and with the exhaustion of easily workable veins the industry gradually suffered a decline. About the time of the Restoration of 1868 the output of the mines did not exceed 2 or 3 million yen. This decline may perhaps have been due, in no small degree, to governmental monopoly of all mining enterprises.

With the Restoration, however, and the extension of mining rights to private individuals on the one hand and the introduction of Western methods on the other, a complete revolution took place, opening up a new era for the industry. The progress made since that time may be seen from the statistics shown elsewhere, the output in Japan proper alone amounting to as much as ¥440-500 millions a year. When to this are added gold, iron, anthracite coal, plumbago, etc., produced in Chosen and petroleum in Taiwan the annual output from Japanese dominions reaches ¥500-600 millions in normal years.

A concession is limited to not less than 50,000 "tsubo" (about 41 acres) for coal and 5,000 for other minerals, but in all cases the area must not exceed 1,000,000 "tsubo" (250,000 acres).

The right of prospecting is valid within the limit of 2 years from the date of registration. Japanese subjects and companies under Japanese law can acquire mining rights which are regarded as real rights and treated as immovable property. However they cannot be made object of right other than that of succession, transfer, collection of national taxes and of distraint. Right of permanent mining may constitute the object of mortgage. The Mining Mortgage Law promulgated in 1905 provides that holders of mining right may create a mining foundation with a view to

its mortgage. A mining foundation consists of the whole or part of (1) mining right, (2) land and structures, (3) superficies and right of land, (4) right of hiring things, (5) machines, tools, etc.

After all Japan has nothing particularly to boast of as regards mineral resources, and indeed it is only in copper that Japan produces more than enough to supply her requirements. Her consumption of iron, coal, petroleum and some others is hardly met by what she produces, so that the shortage has to be imported from outside the country.

DISTRIBUTION OF STRATA

The strata existing in Japan may be classified as follows as to relative percentage:—

Sedimentary Rocks		Igneous Rocks	
Archæan	3.78	Old period	11.24
Palæozoic	10.24	Young period	20.62
Mesozoic	7.95	Total	32.16
Cainozoic	45.87	Grand total	100.00
Total	67.84		

METAL-VEINS AND STRATA

Metal-veins in Japan are generally found in eruptive rocks of the Tertiary formation while the strata exist in the crystalline schist and in Palæozoic formation, locally designated Chichibu system.

Of the metallic minerals in Japan copper is economically the most important, and after it come gold, silver, and iron. The last, however, is less than 1/10 of copper in value. Other minerals worked are, in the order of their economic value, lead, zinc, pyrite, manganese, antimony, tin, bismuth, quicksilver, chromite, tungsten, and molybdenite. Nickel, cobalt, iridium, osmium, etc., are also known to occur, though they have not been worked. Radium is also judged to exist.

NON-METALLIC DEPOSITS

Coal and petroleum are principal non-metallic deposits in Japan, especially coal. It is oftener found in the Tertiary system than in any other. Anthracite coal-fields are found in Mesozoic strata, but they are comparatively insignificant. The seams occur in the Tertiary formation and produce bituminous coal, as all the important measures in Kyushu and Hokkaido are.

MINERAL PRODUCTION

The latest statistics on principal mineral productions in Japan proper are as follows:—

Year	Gold		Silver		Copper		Lead	
	Quantity 1,000 momme	Value Yen 1,000	Quantity 1,000 momme	Value Yen 1,000	Quantity 1,000 kin	Value Yen 1,000	Quantity 1,000 kin	Value Yen 1,000
1923	2,051	10,209	29,837	4,862	96,842	43,488	4,335	667
1924	2,021	10,577	29,380	5,700	105,093	48,541	4,902	969
1925	2,254	13,145	33,651	6,824	110,811	53,467	5,561	1,370
1926	2,427	12,820	37,134	6,024	112,276	50,676	6,017	1,238
1927	2,560	13,164	37,585	5,452	110,952	47,888	5,656	904

Year	Iron		Iron pyrite		Antimony		Manganese	
	Quantity m. ton	Value Yen 1,000	Quantity 1,000 kin	Value Yen 1,000	Quantity 1,000 kin	Value Yen 1,000	Quantity 1,000 kin	Value Yen 1,000
1923	69,458	5,303	60,284	2,992	—	—	1,465	158
1924	65,245	—	38,788	3,030	—	—	2,022	218
1925	88,673	7,043	83,367	4,212	—	—	3,210	260
1926	82,984	8,691	111,337	5,938	—	—	4,056	343
1927	84,503	8,198	134,956	7,373	—	—	7,349	643

Year	Coal		Sulphur		Petroleum (gasoline)		Total value incl. others Yen 1,000
	Quantity 1,000 m. ton	Value Yen 1,000	Quantity 1,000 m. ton	Value Yen 1,000	Quantity 1,000 koku	Value Yen 1,000	
1923	28,949	256,694	27	1,650	145	5,459	374,243
1924	30,110	241,614	46	2,050	1,508	—	351,311
1925	31,459	236,828	47	2,074	1,637	16,835	355,972
1926	31,427	231,042	48	2,585	1,496	14,972	347,844
1927	33,530	257,280	61	3,301	1,449	12,466	368,563

Mineral Output in Recent Years

The output of various mineral products and its percentage in recent years are shown in the appended statistics compiled by the Mining Bureau:

Metals:	1924 Yen 1,000	1925 Yen 1,000	1926 Yen 1,000	1927 Yen 1,000
Gold.....	{ 10,599 ¥3.0	{ 13,145 ¥3.7	{ 12,767 ¥3.6	{ 13,164 ¥3.4
Silver.....	{ 5,700 ¥1.4	{ 6,824 ¥1.9	{ 6,024 ¥1.7	{ 5,452 ¥1.4
Copper.....	{ 48,542 ¥12.0	{ 53,468 ¥15.0	{ 50,767 ¥14.6	{ 47,888 ¥12.9
Iron:				
Pig iron.....	{ 4,163 ¥1.0	{ 4,050 ¥1.1	{ 4,581 ¥1.3	{ — —
Steel.....	{ 2,830 ¥0.7	{ 2,994 ¥0.8	{ 4,110 ¥1.1	{ — —
Total.....	{ 6,993 ¥1.5	{ 7,044 ¥1.9	{ 8,691 ¥2.4	{ 3,198 ¥2.2
Sulphur.....	{ 2,667 ¥0.7	{ 2,074 ¥0.5	{ 2,585 ¥0.7	{ 3,301 ¥0.9
Coal.....	{ 41,614 ¥6.0	{ 236,828 ¥66.3	{ 231,042 ¥66.4	{ 257,280 ¥69.9

Petroleum:	1924	1925	1926	1927
Crude.....	{ 19,444 ¥4.9	16,836 ¥4.4	14,972 ¥4.3	12,466 ¥3.2
Gas.....	{ 1,581 ¥0.4	863 ¥0.2	866 ¥0.1	791 ¥0.2
Total.....	{ 21,025 ¥5.4	17,699 ¥5.0	15,658 ¥4.5	13,257 ¥3.4
Total including others.....	{ 396,176 ¥100.0	355,972 ¥100.0	347,831 ¥100.0	368,568 ¥100.0

GOLD

The principal gold producing districts in Japan are at present confined to the northern corner of Formosa, the northern and southwestern sections of Kyushu, especially Kagoshima, and some northeastern parts of the Main Island, including the island of Sado. Lately Oita-ken has become the most noted centre of production, with an output in 1926 of about 886,728 "momme" representing ¥4,666,390 in value.

Kind of Ores.—Gold occurs chiefly in its native state, frequently mixed with pyrites, chalcopyrite, arsenopyrite, etc. In rare cases it occurs as tellurides. The principal constituent of the gangue is quartz, often with calcite or baryte. In many cases the ore is of a free-milling character, though sometimes clayey or refractory. Gold and silver are found mixed, the one or the other being predominant according to ores.

Deposits and Geology.—The greater parts of the veins worked in Japan are found in Tertiary rocks, especially in the sedimentary and eruptive rocks. The gold ores in Japan occur in the five modes of fissure-filling or veins, impregnations, and in the three modes of deposit, viz. metasomatic, contact-metamorphic and mechanical detrital. This explanation also applies practically to silver, to be mentioned below.

Demand and Supply of Gold.—The total amount of gold demanded at home was estimated formerly at 18 to 22 million yen in value consisting of 15-18 millions for specie reserve and 3-5 millions for medical and industrial purposes. Against this the total produced in Japan, Formosa and Korea was about ¥25 millions. Recently over 30 millions are yearly consumed for medical and industrial purposes alone, while, on the other hand, the output has declined to 20 millions due to suspension of work at many mines owing to the increased cost of production since the War. The deficit ¥10,000,000 has to be met by importing foreign gold or by other means.

Placer Gold

The placer gold in Japan mostly comes from the disintegration of quartz veins in volcanic rocks in the Palaeozoic, Mesozoic, and Tertiary formations. The locality most celebrated for it is or rather was Esashi in Hokkaido, the Klondyke of Japan. In 1899 there was collected 119,082 "momme" of gold according to the official returns and there a gold nugget weighing 198 "momme" was once picked up. The placer has subsequently lost much of

its fame. The sources of the placer deposit of Esashi are quartz veins in the Palaeozoic formation. In Ishikari and Hidaka placer gold is often associated with platinum and iridosmium. Placer mining was at one time very active in Kagoshima.

SILVER

As in the case of gold, silver ores in Japan are found in the inner side of the northern and the southern area of Japan proper, owing to the fact that the neo-volcanic rocks from which the metal is chiefly derived, exist in highly developed condition in those particular regions. Just as in the case of gold, silver veins are mainly found in the eruptive and sedimentary rocks of the Tertiary formation. The ores exist in the form of argentite, itephanite, pyrergyrte, etc. but in Japan such minerals as galena, tetrahedrite, chalcopryite, etc. yield larger supply of the metal. Silver mines now worked exist in the Main Island, Kyushu and Hokkaido, but are absent in Formosa and Shikoku.

COPPER

Next to coal, copper is the most important mineral production in Japan. The ores are found both on the outer and the inner side of the southern and the northern arc of Japan proper. The contact-metamorphic type is much in evidence in the southern arc, and the metasomatic type in the northern, while the vein type predominates in the inner arc, i.e. the region on the Japan Sea side. It is in the latter that greater part of the mines exist.

Kind of Ores.—Chalcopryite and bornite are the principal copper ores, their gangues being chiefly quartz and calcite. The veins occur in the sedimentary and eruptive rocks of the Tertiary ages, large numbers of the principal mines being included in this group. Metasomatic deposits are represented by a complex sulphide called "kuroko," or black ore, consisting of intimate mixture of galena, zincblendes, and baryte. This is chiefly found in the Tertiary. The relative importance of the different kinds of ore as based on the production of 53 principal mines which supply about 87% of total output is as shown below:—Veins, 32 mines supplying 44.8%; beds, 11 mines, 20.9%; metasomatic deposits, 3 mines, 18%; contact-metamorphic deposits, 7 mines, 4%.

The war boom has left the copper mining industry of Japan in a crippled state owing to the cost of production remaining on a much higher level than in America, and Japan, which before the world's war ranked second to America as exporter of this metal, has lately begun to purchase it from that country, as shown in the following figures (in Eng. tons):—

Year	Production	Import	Export	Consumed	In stock
1924	61,534	6,090	324	64,785	9,142
1925	63,513	3,138	266	70,278	5,249
1926	63,375	13,910	134	76,915	5,485
1927	60,460	9,637	76	70,744	4,764
1928 (end of May)	25,926	2,591	7	31,275	—

For the marked drop in production the close of minor mines

is responsible, the leading mines operated by wealthy owners such as Hitachi by Kuhara, Ashio by Furukawa, Besshi by Sumitomo, Kosaka by Fujita, and Osarusawa and Ikuno by Mitsubishi keeping up their work practically uncurtailed. The first four mines now produce about 64% of the total output in Japan.

Manufactured Articles.—Another equally notable feature is an increased consumption of metal at home, due to the fact that the leading copper magnates have begun exporting it not as raw material but as finished articles, i.e. wire, plate, rods, electric machines, etc. all the five leading copper-mines running their own works for the purpose. What is interesting is that the Furukawa Firm arranged with the A.E.G., Germany, for the production of finished copper articles at its works near Ashio. It may be added that to rescue the copper industry from the menace of being swamped by the cheaper American production the Diet passed in the spring of 1921 a bill to raise the duty from ¥1.20 per catty to 7.00.

IRON

Japan is poor in iron ores, and they consist of 1. magnetite, 2. hematite (micaceous and compact red iron), 3. limonite, 4. iron sand, the yield from these ores being estimated at roughly 5,000,000 tons. Then there are in Korea and Formosa another 50,000,000 tons: Manchuria has Anshantien and Penshihu mines with deposits estimated at about 80,000,000 tons, excluding ores of less than 25%. Lastly near Tsingtau, there is Kinling judged to hold 80,000,000 tons. Sand iron was very largely utilized in remote time for making swords and other kinds of cutlery and is found extensively in southern and north-eastern parts of the Main Island.

How much of all these different ores admit of economical working is still an open question. In 1921 only 87,000 tons represented the production of native ores, while the quantity imported from China and Korea and Formosa reached 765,000 tons, of which 70% came from China with which Japan is under special contract for the supply. The store in China is immense, those iron beds so far explored being estimated to contain no less than 7,000 million tons, though the enforcement of various obstructive measures unfavorable to foreign exploitation makes the supply of Chinese ores at best precarious.

Recent Development.—The enactment of a law for protecting the iron industry in 1918 resulted in increasing the number of iron works from 22 before the European War to over 300 in 1919. The output also rose in the same period from 24,000 m. tons of pig-iron and 250,000 m. tons of steel materials to 877,000 of pig-iron, 844,000 of steel and 625,000 of steel materials. The total investment at the end of 1921 amounted to ¥350,000,000 including ¥100 millions of the Government and semi-Government investment (Yawata Iron Works and South Manchuria Rly's Anshantien Works). In the same year the working capacity of the iron works amounted to 1,412,000 tons of pig iron (400,000 Govt. and 1,012,000 private), 1,033,000 tons steel (750,000 Govt. and 283,000 private), and roughly 1,450,000 tons of steel materials.

Output.—The actual output in 1921 was less than one half the capacity, i.e. 566,531 tons pig and 557,826 tons steel materials, similar figures for 1926 rising to 809,624 and 1,330,680 respectively. The consumption in Japan proper is far in excess of the above figures, being estimated at 1,000,000 tons for pig and 1,200,000 for the other, which can easily be supplied at home if all the furnaces are allowed to work full time. This, however, is economically impossible in the presence of far cheaper American and Indian productions which are arriving freely in defiance of the tariff wall created to protect the home industry. In point of fact, Japan is seriously handicapped in this industry, both as regards relative poverty of iron ores and coal, next in the higher wages, as compared with China and India, and lastly in the imperfect technical development.

The statistics for the last few years ending 1927 (in French tons) is as follows:—

Year	Production	Import	Export	Consumption
1922	39,744	908,337	—	948,081
1923	55,174	988,650	—	1,043,824
1924	65,269	1,351,371	48,269	2,060,682
1925	64,640	784,207	51,164	1,633,914
1926	82,984	1,248,081	23,592	2,135,022
1927	84,508	*25,057,242	*412,887	—

* In picul.

LEAD, BISMUTH, ZINC

The principal ores are in the form of galena associated with zincblende. The ores are distributed along the inner arc of Japan. Bismuth is negligible in output, and comes chiefly from Kamioka mine.

In geological formation and distribution zinc is practically identical with lead. As zincblende the ores are extensively distributed. Fukuoka is the centre of zinc. The output of zinc reached its apex of 64,989,177 "kin" valued at ¥27,215,753 in 1916 gradually to come down to 477,672 "kin" (¥410,059) in 1922, but has again begun to increase afterward, the figures for 1926 being returned as 908,377 "kin" (¥1,664,894).

IRON SULPHIDE

The pyrite deposits, now so extensively used for manufacturing sulphuric acid, are extensively distributed, that is in the Main Island, Kyushu, and Shikoku.

TIN

Tin occurs in Japan as veins and deposits, the former generally in Palaeozoic and Mesozoic strata, and sometimes in granite. The deposits are found chiefly in Kyushu, and also in Tajima and Mino.

The tin industry is a new innovation, and is an enterprise of the Mitsubishi which started the refining business at its Ikuno mine in 1914. At the Firm's Osaka Smelting Works tin printing rolls are also produced.

ANTIMONY, MERCURY, ARSENIC, GRAPHITE

Occurring in the form of stibnite, antimony ores are found along the Mesozoic strata which extend from the Province of Yamato to Hyuga and Osumi in Kyushu via Tosa and Iyo in Shikoku. Encouraged by the extraordinary demand occasioned by the War, the output jumped up to over 18,000,000 "kin" in 1916, but it gradually declined. Mercury exists chiefly in Shikoku, where in Awa the Suigin mine supplies cinnabar along the plane of fault in the Mesozoic limestone. Arsenic is found in Kyushu, mostly in the form of arsenious oxide. Arsenopyrite, arsenious sulphide, and realgar are also found in Echigo and Hokkaido. Graphite was produced to the amount of 3,250,013 "kin" in 1919, to drop to 380,000 "kin" in 1926.

TUNGSTEN, MOLYBDENUM

Of these rare metals the former comes from Gifu, Yamanashi and a few other places. Several rich tungsten veins have been discovered in Korea. The other comes from Toyama, where the output of the ores was pushed up to 3,224 "kwan" during the world war.

SULPHUR

Japan being a volcanic country is naturally rich in sulphur deposits, they chiefly occurring as solfatara. Only high grade deposits alone are generally worked, i.e. those containing not less than 40%. Sulphur deposits are much in evidence at the northern corner of Formosa, the Japan Sea districts in the northern Japan, and the eastern part of Hokkaido.

PRINCIPAL METAL MINES

The leading metal mines producing not less than ¥1,000,000 worth a year all combined, including gold, silver, copper, etc. and the kind of ores, are given below (figures in unit of ¥1,000):—

Names of mines	1926				1925			
	Gold	Silver	Copper	Total incl. others	Gold	Silver	Copper	Total incl. others
Ashio	152	627	9,843	10,876	229	812	10,054	11,412
Besshi	845	736	9,092	13,097	725	555	12,854	15,423
Saganoseki	3,252	1,120	6,505	10,877	3,252	1,120	6,505	10,877
Kosaka ...	641	668	670	8,033	613	736	6,281	7,644
Kamaishi ..	—	—	—	7,072	—	—	—	5,342
Ikuno	—	—	—	—	—	—	—	1,122
Osaruzawa ..	56	67	2,217	2,340	57	88	2,471	2,615
Kamlaka ..	78	310	8	2,273	57	391	11	1,559
Hidachi ..	2,188	831	6,093	9,309	—	—	—	—
Kushikino..	—	—	—	—	—	—	—	—

COAL

The coal found in Japan is bituminous and lignite, and is of Tertiary formation. The anthracite seams are rare and negligible. Of the Tertiary coal-fields those in Kyushu and Hokkaido

are the most extensive and valuable. In Honshu there are no remarkable coal-fields except one extending over Iwaki and Hitachi which yields coal inferior to that of Kyushu and Hokkaido in quality as well as in quantity. The principal coal-fields in Kyushu are those of Chikuho (Chikuzen and Buzen), while in Hokkaido the coal-fields in the province of Ishikari are most important. The coal-fields now in operation aggregate 410 million "tsubo" in area in Japan proper besides 395 millions now closed down. According to the investigation made by the authorities concerned, the available quantity is distributed as follows (in 1,000 Fr. tons):—

	Amount	Rate
Kyushu	20,268	63.1
Hokkaido	5,191	17.2
Iwaki	3,042	10.1
Yamaguchi	1,610	5.3
Total incl. others.....	30,210	

As regards the industrial aspect of this mineral, the following figures quoted from the "Major Industries of Japan," issued by the "Oriental Economist" Tokyo, in January 1924 and the monthly return of the Finance Department may be useful:—

Investment

Year	No. of Cos.	Sub. cap. in Yen 1,000	P'd up capital
1924	97	400,642	399,156
1925	91	386,946	257,516
1926	95	320,451	218,824

Output, Import, Export, etc.

The following figures show the statistics of output, import, export and consumption of coal for the whole country (in 1,000 Fr. tons):—

Year	Output	Import	Export	Consumption
1922	27,702	1,187	1,704	28,964
1923	28,949	1,652	1,574	31,019
1924	30,111	1,978	1,711	32,578
1925	29,216	1,768	2,698	29,903
1926	29,263	2,508	2,589	30,184
1927	32,500	3,200	3,390	29,910

The perceptible decline is noticeable in output and for this the relatively higher price, about double that in America, is responsible, not to speak of the encroachment of the cheaper hydro-electricity. The high price is attributable to the distance of the principal coal-mines from industrial centres, heavy freight charges both on that account and defective facilities of loading and unloading, low efficiency of Japanese workers and lastly high wages. These discouraging factors are, it may be added, equally handicapping other industries in Japan. At any rate the freight of Hokkaido coal shipped at either Muroran or Otaru amounts to about 50% of the spot price in Tokyo.

In efficiency the daily extraction per worker at the Yubari mine is put at 0.64 tons against 0.8 in England for 1918 and 2.27

anthracite and 3.77 bituminous in America. This low efficiency is chiefly due to the poverty of the Japanese seams and the greater difficulty experienced in using mechanical contrivances.

Cost of Extraction.—All those disadvantages place the cost of extraction at a very high level. Before the War per ton cost of extraction at three collieries in the Joban districts, the nearest mining centre to Tokyo, averaged ¥3.15 but in the second half of 1927 the corresponding figures stood at ¥13.50.

Business Result of Colliery Cos.—Affected by such adverse circumstances, the colliery cos. are struggling hard to keep themselves afloat, and even the best paying Iriyama colliery that realized profit ranging from 74 to 117% between the 2nd half of 1917 and 1st half of 1920 and declared a dividend of 50 to 80% had to content itself in the 1st half of 1923 with profit of only 17.1% and a dividend of 10%.

Output of the Chief Coal-Fields in Japan Proper

(1,000 grammes)

Coal-field	1926	1925	Worked by
Milke (Kyushu)	2,109	2,153	Mitsui Mining Co.
Yubari (Hokkaido).....	1,154	1,136	Hokkaido Coal S.S.
Bibai (").....	823	762	Mitsubishi Mining Co.
Mitsui Tagawa (Kyushu)	1,019	1,047	Mitsui Mining Co.
Onoura (")	1,360	1,306	Kajima Mining Co.
Futase (")	949	1,013	Dept. of Agr. & Fore.
Iriyama (Iwaki)	413	384	Iriyama Coal Min. Co.
Hokoku (Kyushu)	530	509	Meiji Mining & Co.
Matsushima (Nagasaki).	443	454	Matsushima Min. Co.
Nakatsuru (Fukuoka)...	490	507	Taisho Mining Co.
Uchigo (Iwaki)	864	814	Iwaki Coal Min. Co.
Namazuta (Kyushu)....	606	615	Mitsubishi Co.
Shinnyu (")....	575	555	K. Sumitomo.
Tadakuma (")....	425	432	Mitsui Mining Co.
Mitsui Yamano (")....	597	586	Takatori & Co.
Kishima (")....	219	411	Dep't. of Navy.
Shinbara-Navy (")....	429	392	Navy Department.
Shin-yubari (Hokkaido).	557	548	Hokkaido Colliery S.S. Co.
Okinoyama (Yamaguchi)	948	658	Watanabe Yusaku.

The following statistics compiled by the Mining Bureau shows the details of the output of the chief coal mines for 3 years ending 1926:—

Year	Lump (Yen 1,000)	Dust (Yen 1,000)	Unscreened (Yen 1,000)	Peat (Yen 1,000)	Total incl. others (Yen 1,000)
1924	91,797	91,868	47,009	10,246	241,614
1925	90,839	95,286	40,686	9,427	236,828
1926	85,970	97,879	36,578	9,765	231,042

Analysis of coals from the principal coal-fields is shown below:—

Field	Name of coals	Water	Volatile matter	Cake	Ash	Sulphur	Calorific quality	Specific gravity	Calorific power
Chikuho	Namazuta	1.66	42.50	52.68	3.16	0.81	{ Cakes and Swells }		1.208 75.90

Milke 8 ft. seam.....	0.70	42.15	43.85	3.30	3.34	Cakes	1.278	—
Hizen Takashima	0.98	39.08	53.52	6.53	0.65	Cakes	1.270	80.30
Ishikari Yubari.....	1.46	42.89	57.11	4.54	0.30	Not	1.200	—
Jo-ban Shiramizu....	5.05	44.36	40.81	3.75	1.39	—	1.304	Superc

PETROLEUM

Petroleum veins are principally found in Tertiary terrains and, according to geologists, the oil-bearing veins extend from Formosa to Saghalien. In practice the districts bordering on the Japan Sea, especially Niigata-ken (Province of Echigo) and Akita-ken, are the oil-fields of Japan. Petroleum was known in Echigo from remote time, but it was from 1900 that the industry began to present a marked activity. The principal concessions in that district are Higashiyama, Nishiyama and Nitsu, while those in Akita are Kurokawa, Toyokawa and Michikawa, all of which date from 1913.

In this important mining product also Japan, as in regard to coal and iron, is far from being self-supporting. The consumption of petroleum in Japan by private users is estimated in the neighborhood of 2,600,000 "koku" (1 ton=6 koku) per annum. The total must reach some 5,000,000 "koku" if the consumption by the Navy is taken into account. Against this the home supply in 1921 amounted to 1,916,000, or about 60% of the private consumption. The shortage is covered with import from California, Java, Borneo and Mexico. The prospect of the industry is by no means reassuring; on the contrary, judging from the result of working in recent years the fear is entertained that the limit of economic working may have been reached, and that the hidden reservoirs are rapidly exhausting. This is indeed the conclusion to which the "Oriental Economist" has been driven in a careful survey of the situation given in the "Major Industries of Japan" already referred to, and on which this article is based.

Output.—During the ten years ending 1924 the annual yield of crude oil was returned at roughly 1,515,000 "koku". The adoption of the American rotary system in well-sinking in 1912 marked the turning point as to output but only for a while, as shown in the following figures in 1,000 "koku":—

1918	2,143	1923	1,576
1919	1,964	1924	1,580
1920	1,950	1925	1,637
1921	1,961	1926	1,406
1922	1,799	1927	1,630

Inversely to this steady decline of yield from 1917 the oil companies had to invest a larger capital, their paid-up capital growing from ¥68,328,000 in round numbers in 1921 to ¥121,202,000 in 1926.

Concessions and Prospecting Licenses.—The prospecting licenses granted are disproportionally larger than cases of actual exploitation. In 1915 the latter corresponded to 46.2% of the other, but in 1921 the ratio fell to 23.3%. On the other hand, this proportion is reversed as regards the leading oil-fields, the concessionaires being persuaded to sink new wells to make up for the declining yield of the old wells: For instance, the output at

Kurokawa which reached 1,000,000 "koku" in 1915, the highest in the history of Japanese petroleum industry, has recently dropped to only 270,000 to 280,000, and in the meanwhile the number of wells had increased by about 100, while Niitsu that produced 950,000 "koku" in 1907 managed to get 550,000 in 1921 by tapping about 340 new wells.

Output of Refined Oil.—The position of the production of refined oil is indicated in the following figures in 1,000 cases:—

Year	Gasoline	Kerosene	Neutral Oil	Fuel Oil	Lubricating Oil	Total
1924	623	794	2,545	600	1,519	6,081
1925	864	793	2,483	589	1,400	6,199
1926	1,153	545	2,560	585	1,380	6,223
1927	1,342	641	2,293	557	1,667	6,519

Supply and Demand.—Until about 1916 the home production of crude oil was approximately 2,000,000 koku, covering about 80 per cent. of the consumption. Since then the output gradually decreased against the fast growing demand till the volume of the home produce fell off to 1,630,000 koku in 1927, the relative ratio of supply to demand diminishing to only about 25 per cent. The following statistics will serve to show the situation of the demand and supply of various forms of refined oil in 1917 and 1927 (figures in koku):—

	Gasoline	Kerosene	Neutral	Fuel	Lubricating	Total
1917 { Output	125,420	456,000	615,540	504,400	353,800	2,055,160
1917 { Demand	148,200	855,400	543,600	569,200	369,800	2,486,200
1927 { Output	232,400	128,200	458,620	115,000	333,480	1,267,700
1927 { Demand	1,249,200	633,800	972,000	1,703,080	977,200	5,535,280

Foreign Oil in Japan.—The shortage of home supply has obliged Japan to import a large quantity of foreign oil from former times and the arrivals will probably grow on increasing in view of the declining yield from the existing wells unless new rich veins are discovered. At one time the Standard Oil Co. of America took part in competition with the native companies to exploit the oil-fields of Echigo, but since the discontinuation of this enterprise in 1907, the Standard has chiefly confined its operation to shipping refined oil, just as its foreign rivals, the Rising Sun, had been doing. The import of foreign oil, both crude and refined, is steadily increasing year after year, the arrivals of refined foreign oil during the eleven years ended 1903 averaging roughly 1,150,000 per annum. During the five years ended 1927 the following arrivals in "koku" were recorded exclusive of the import by the Navy:—

Year	Gasoline	Kerosene	Lubricating	Fuel
1922	248,372	710,019	182,616	—
1923	269,521	661,388	183,729	92,986
1924	458,582	593,456	417,604	52,370
1925	472,870	—	570,533	2,165,980
1926	729,815	642,062	535,541	2,475,808
1927	874,573	574,206	498,256	1,878,070

The idea of refining the imported crude oil in Japan was once attempted by native and foreign business-men, and the Rising Sun even invested no small sum in erecting a necessary plant about 1909 in Kyushu, importing the oil from Borneo and

Java. Probably in consequence of the adoption of a new tariff rate on crude oil about that time all these crude oil undertakings have fallen through.

The enterprise has recently been revived, encouraged by the low cost of the crude oil and the advance, in Japan, of the refined goods, and especially in consideration of the decline of the native output. The revived attempt became manifest about the fall of 1921 and several companies were floated with that special purpose, the supply of the oil coming from the South Seas, California, Mexico and Persia. It is a significant sign of the times that even the Japan Petroleum Co., which absorbed in 1921 its formidable rival, the Hoden, and now practically monopolises the oil industry of Japan, is said to have arranged for the import of crude oil. Indeed the Co. is reported to have imported crude oil and gasoline in 1927 of as much as 40,000 tons out of the total arrival of 475,000 tons. The Rising Sun's share amounted to 130,000 tons. * Even Mitsui Bussan and Mitsubishi have joined in this business.

The Fuel Question

The growing demand of the Navy, shipping trade etc. for heavy oil aroused in Japan, as in some countries in the West, serious discussion of both the Government and general public on the question of fuel supply. The Navy gets the bulk of heavy oil imported from Borneo and California and undertakes the refining to the amount of 100,000 tons which will be increased to 200,000 in the near future. The Navy Fuel Dept. was created in 1921 to investigate the nature, preparation and utilization of fuel of all kinds. (See "Fuel Problem," Supplement, 1927 edition).

INVESTMENT IN MINING BUSINESS

The investment in mining business is steadily increasing, coal claiming the largest share followed by metals and petroleum. The progress during 1925 and 1926 may be seen from the following table, capital paid up being in ¥1,000:—

Kinds of business	1926			1925		
	No. of Cos.	Cap. subscribed	Cap. p. u.	No. of Cos.	Cap. subscribed	Cap. p. u.
Metal	69	567,586	271,720	66	468,093	362,093
Coal	95	320,451	218,824	91	386,946	25,206
Petroleum	21	159,450	121,202	20	150,800	109,197
Non-metal	13	11,875	6,939	15	6,865	5,727
Miscellaneous ...	151	27,569	13,681	133	23,693	12,191
Total	349	1,086,931	632,365	325	1,036,396	746,725

NUMBER OF MINE-WORKERS

Mine-workers and placer workers as classified by the mines they are working at are as follows:—

Mine-Workers

Year ended June	Metal	Coal	Oil-wells	Total includ. others
1924	42,361	251,069	6,940	305,648
1925	44,861	252,898	7,320	310,426
1926	46,923	235,044	6,406	293,562

Total Number of Workers Employed (1,000)

Year ended June	Metal	Coal	Oil-wells	Total includ. others
1924	12,977	59,721	2,120	76,114
1925	13,524	60,368	2,229	77,581
1926	13,753	57,433	2,118	74,574

Placer-workers

December	Gold	Tin	Iron	Others	Total
1924	126	—	156	114	396
1925	188	—	190	164	542
1926	85	—	130	207	422

Workers Employed at Metal Mines

December	Gold	Tin	Iron	Others	Total
1924	17,136	—	5,014	11,887	34,037
1925	16,586	—	6,609	16,142	39,337
1926	2,062	—	5,825	17,054	24,941

Accidents at Mines

December	No. of accidents	Casualties			
		Death	Severely injured	Slightly injured	Total injured
1922	164,147	585	6,277	158,756	165,033
1923	186,963	741	6,559	181,311	187,870
1924	175,080	903	7,311	168,391	175,702
1925	187,026	786	5,646	181,869	188,301
1926	158,332	801	3,790	154,678	159,269

CHAPTER XXXIII

INDUSTRY

GENERAL REMARKS

Japan's industrial revolution after the Restoration, and the gradual displacement of household industry by the factory system, and handwork by machines were most marked after the Sino-Japanese war of 1894-5. The growth of national consciousness resulted in the creation of factories of manifold kinds and this activity was especially conspicuous in the spinning industry. By the time of the Russo-Japanese war of 1904-5 the mechanical industry had made a great stride while the chemical industry appeared on the scene. The promotion of electric supply business was also a new feature of the times. It should be added that for this rapid development of our industry, the technical education encouraged both by the Government and general public played an important part. The European war had the effect of stimulating and carrying all industrial activities to a state of unprecedented prosperity, for not only were all manufactures sufficiently developed to meet the demand at home but could produce enough to ship a large quantity abroad. Especially noteworthy was the activity of shipbuilding, iron, steel, chemicals, ceramics, woollen fabrics, machines and various other industries supplying articles of daily use. Japan was no longer a mere imitator of the Western method in her industry but was now in the position to develop her own originality, thanks to the establishment of laboratories of the latest type and the further progress of technical education. The rapid growth of the manufacturing and other industries was not an unmixed good, for in their haste to meet foreign orders, even at exceptionally low rates, Japanese manufacturers not unfrequently did not scruple to ship abroad articles of inferior quality. To recover this impaired reputation and the foreign markets closed to their productions, Japanese manufacturers, under strong warning from the authorities, have started a movement to adopt measures intended to prevent the appearance of shoddy goods.

Deflation & Contraction:—As the only expedient for self-preservation, almost all the manufacturers have been obliged to restrict the output unduly expanded during the war boom. The first restriction was called for soon after the post-bellum reaction and was aimed at clearing the heavy stock left as a drag on the market with the restoration of peace. The restriction was temporarily suspended, in some fields of manufacturing industries at least, when the stock in the Tokyo-Yokohama districts was destroyed in the disaster of 1923. With the lapse of this temporary activity in the fall of 1924, the manufacturers had to meet the necessity of effecting drastic readjustment of their abnormal position that had been delayed by the earthquake disaster. The result was the second period and more thorough.

contraction that set in about that time and this heroic measure seems, it is satisfactory to see, to have been carried out for larger half of all the economic and industrial organizations in Japan, thereby giving hope for the recovery of their normal condition sooner or later.

FACTORIES AND EMPLOYEES

The official statistics of factories employing over 5 operatives are as follows:—

	No. of factories			No. of Operatives		
	Run by motive power	Run by manual power	Total	Male	Female	Total
1923 ..	35,360	12,426	47,786	838,197	926,936	1,765,133
1924 ..	37,141	11,253	48,394	859,783	929,835	1,789,618
1925 ..	38,221	10,940	49,161	852,554	955,827	1,808,381
1926 ..	41,514	10,392	51,906	893,834	981,361	1,875,195

The sudden decline in the number of factories run by motive power in and after 1922 was due to adverse reaction after the war boom. In the case of factories run by manual power, only those employing 5 operatives or over are included. Classified according to the nature of industry the figures for these factories, horse power, etc., in 1926 are as follows:—

	Factories run by motive power	Factories run by manual power	No. of Workers
Textile	13,325	2,716	998,447
Mechanical	2,987	296	100,477
Chemical	2,115	487	111,249
Comestibles	7,712	2,618	167,144
Machine & tools....	3,591	478	236,051
Potteries	1,515	1,057	65,063
Wood	3,042	633	51,844
Printing	2,140	122	51,215
Gas & electric.....	345	48	7,904
Miscellaneous	2,382	2,337	85,801
Govt. works	300	44	133,938
Total	41,514	10,392	1,875,195

Development of Motive Powers.—Figures of H.P. for 1926 are classified as follows according to the kind of engines used:—

	Horse power		Horse power
Steam	535,834	Motor	1,794,644
Steam turbine	1,160,279	Water wheel {	Turbine. 871,403
Gas	37,617		Pelton's. 225,821
Oil	21,277		Japanese 5,598

(For details concerning factory labor such as the question of working hours, relative ratio of male and female operatives, wages, etc. readers are referred to the Chapter on Labor and Social Problems).

1. SPINNING AND WEAVING

(1) SPINNING

(A) Cotton Spinning

According to the report of the Japan Spinners' Association formed by 64 companies which practically control over 90% of the total of this particular industry, the paid-up capital amounted to over ¥392 millions and reserves ¥190 millions, at the end of 1927, the number of factories over 257. As regards the number of working spindles, Japan with over 6,000,000 ranks 7th on the list of leading spinning countries of the world.

The progress of the cotton spinning in Japan is indeed quite creditable, for in 30-40 years it has attained the position of foremost importance in her industrial scheme, the export of cotton yarns and fabrics amounting to 25-30% of the total value of Japan's export trade in recent years.

This development is all the more remarkable as Japan has to contend with adverse circumstances, being dependent upon foreign supply for raw materials and machinery. The drawback has been partially compensated by cheap female labor, nearness to the world's greatest market of cotton yarns, China and other Eastern countries, and peculiar skill in mixing up Indian, American and Chinese cotton. The domestic and Chinese demand for coarse yarns under No. 20 counts, for which unskilled female labor can fully be utilized, may also be mentioned in this connection.

Japanese Spinning Mills in China

The Japanese spinning enterprise in China is represented by 953,432 spindles in Shanghai, 243,848 in Tsingtao, 74,176 in Manchuria, 24,816 in Hankow, 25,600 in Woosung; total 1,321,872 in 1926. There are besides 65,000 bought from a certain English mill and 125,000 Chinese spindles managed by Japanese under trust. The Japanese activity in this particular field in China therefore comes to nearly 1,500,000 which amounts to more than 40% of the total in operation in that country. What is remarkable about the spinning business is that almost all the cotton mills run by native or alien capitalists have so far belied their anticipation. The Japanese concerns are relatively best but even their shares stand far below par, that of the Nikka, for instance, being quoted below the paid-up sum, though it has declared dividend of 10% for some terms past. Considering the various advantages favoring that land, as cheapness of labor and raw material, saving of import duty, etc. this phenomenon is really enigmatical. The explanation offered is that it is probably due to the thievish and corruptible propensity of the Chinese, ignorance of laborers, high rate of interest, and excessive development of individualism at the expense of cooperative spirit.

Shanghai is the most important centre and contributes over two-thirds both of spindles and looms, of Chinese, Japanese and foreign mills. In consequence the export of Japanese cotton yarns and fabrics to Shanghai has declined, the decrease being more marked in coarser yarns than in finer grades.

Present Tendency

To meet the changing situation Japanese spinners have begun to direct their attention to the manufacture of (1) finer counts and of superior quality, (2) cotton stuffs of various descriptions, as sheetings, towels, blankets, hosiery, shirts, etc. The new policy requires higher technical skill than can be expected from the 2 shift system, day and night, still prevailing in most Japanese mills. No skilled labor can be developed under such congenial conditions.

Disposal of Cotton Yarns

The following table summarizes the relation between supply and demand (in bales):—

Year	Output	Imported	Exported	Consumed by Cos. for weaving purpose	Consumed at home
1923	2,171,153	—	248,324	600,001	—
1924	2,072,818	8,972	264,427	612,594	1,189,864
1925	2,436,786	3,641	293,026	682,955	1,460,804
1926	2,607,747	2,937	203,505	740,485	1,663,757
1927	2,530,692	2,821	115,287	732,911	1,638,737

Output of finer yarns is steadily gaining ground, and at present those of 43 counts or higher form about one half of the total exports.

The abolition of night work after July '29 and the possibility that India, which raised import tariff on cotton yarn in the autumn of '27, will again increase duty on the goods as well as cotton fabrics is a serious problem for Japanese spinners. As a counter-measure against the discontinuance of night work after July '29 in accordance with the provisions of the revised Factory Law the spinning concerns have since '26 been increasing the number of spindles of their plants. Thus the number of working spindles on Sept. 1, '28, was returned as 6,114,982 against 5,571,852 in July '27, the latest data showing an increase of nearly 800,000 over that in July '26, when the revised Factory Law became effective. If the figure of minor mills not identified with the Cotton Spinners Leagues is added it is estimated that the addition of spindles by the end of June '29 will reach 1,000,000.

Another important sign is that the number of operatives is showing a reverse tendency, the average figure per month for the first half of '28 being 36,147 males and 117,398 females against 39,828 males and 137,418 females of the same period of '27, and 40,693 males and 142,263 females of '26. What is reassuring is that this economizing of man-power, instead of affecting the production, seems to operate contrariwise, at least in the case of the Dai-Nippon Mill. It dispensed with about 7,000 hands recently, but has realized a perceptibly increased output per spindle per day, this phenomenon being attributed to the improved manufacturing process and the increase of spindles.

Raw Materials Imported.—In the absence of raw cotton at home Japan must rely upon China, India, U.S.A., etc. for its supply. The American cotton is arriving in larger quantity, owing to the gradual improvement in the quality of yarns produced. The imports in 1926 and 1927 are classified as follows

according to countries and including cotton in the seed and ginned cotton (in 1,000 bales of 400 lbs.):—

Year	American	Indian	Chinese	Egyptian	Others	Total
1926	1,148	1,893	520	46	20	3,639
1927	1,627	1,623	620	43	54	3,969

Financial Aspects

The business aspect of the spinning companies has, taken on the whole, been far more favorable than that of any other lines of equal importance. Details are shown below:—

	Working year	Capital p. u. (Yen 1000)	Profit (Yen 1000)	Percent of profit	Dividend
1923.	{ 1st half	310,954	45,581	29.3	21.1
	{ 2nd "	319,087	23,747	14.9	16.7
1924	{ 1st "	329,561	39,424	23.9	16.2
	{ 2nd "	344,620	42,575	24.7	16.3
1925	{ 1st "	345,267	46,082	26.7	16.9
	{ 2nd "	349,104	33,363	19.1	16.4
1926	{ 1st "	356,624	32,960	18.5	15.3
	{ 2nd "	357,495	34,369	19.2	14.8
1927	{ 1st "	342,265	31,455	18.4	14.5
	{ 2nd "	349,109	38,274	21.9	14.7
1928	1st "	384,676	38,856	20.2	13.5

Average Working Spindles Per Day

Year	Rings	Mules	Looms	Throwing spindles
1922	4,472,000	45,500	60,765	602,032
1923	4,422,000	14,370	64,460	510,031
1924	5,101,000	25,150	68,579	685,995
1925	5,266,000	26,040	71,702	723,824
1926	5,644,000	35,000	77,000	789,000
1927	6,079,000	37,000	78,000	787,000

Thrown yarns produced in 1926 amounted to over ¥14,989,000.

(B) Silk and Hempen Spinning

Silk spinning is generally a subsidiary business of leading cotton mills as Kanegafuchi, Fuji, Nagoya, etc. The official statistics give the output of spun silk in 1925 at 1,059,000 "kan" valued at about ¥62 millions, similar figure for 1926 being returned as 1,216,000 "kan" valued at about ¥63 millions.

Hempen spinning and weaving business is conducted by the Teikoku Seima. According to the official statistics the position of this industry for 1926 is represented by these figures:—

No. of mills 17; average working spindles per day 64,697; hemp consumed about 3,500,000 "kan" and output of yarns 2,222,000 "kan" valued at ¥17,057,000. Besides, there were 21,212 weaving families employing 29,989 looms, the total output for 1926 being valued at about ¥23,346,164.

(C) The Rayon Industry

Started in 1918, the development of the industry has since been remarkable. The situation of the industry is indicated by the following figures:—

	1925 (lbs.)	1926 (lbs.)	1927 (lbs.)
Output	2,800,000	5,000,000	10,500,000
Import	825,000	3,293,000	604,000
Consumption	4,200,000	7,600,000	11,300,000

Until 1926 the two oldest mills of Japan, Teikoku Jinken and Asahi Kenshoku, supplied about 90% of the total production, but since then eight new mills have been created, viz., Toyo Jinken, Mie Jinken, Kawagoye Jinken, Nihon Rayon, Toyo Rayon, Kurashiki Boseki, Nippon Keori and Showa Rayon. These mills are capable to turn out some 48,500 lbs. a day, the production for 1928 being estimated at 17,320,000 lbs. From this it may be concluded that there is the possibility of the market being over-supplied, for in spite of the ¥94 duty imposed per 100 lbs. the arrival of foreign goods may not decline owing to their lower quotation. Of the foreign arrivals the Italian goods formed in 1926 about 30% and the English 20%.

(2) TEXTILE INDUSTRY

Japan's textile industry is more than self-sufficient both in cotton and silk piece goods so that no small quantity of these textiles is shipped to foreign markets. The productions are however defective in one important respect. In other words they lack cosmopolitan quality as regards width and length. Those intended for home market measure only 1 ft. in width and 28-30 in length and are therefore not fit for foreign market. Fabrics that are wider are restricted to calico shirtings, sheetings, "Kaiki," etc., that are either of recent origin or are intended for export. A movement is now on foot to remove this defect. The official statistics for recent years are as follows:—

Statistics on Textile Industry

Year	Factories	Looms		Operatives (average per day)	Output
		Motor driven	Hand looms		
1924	249,860	260,222	348,206	669,355	1,531,870,041
1925	232,806	368,201	303,784	634,733	1,502,292,082
1926	168,423	371,828	252,339	584,019	1,446,287,750

The output of fabrics is classified as follows (¥1,000):—

Year	Silk fabrics	Silk and cotton mixed fabrics	Cotton fabrics	Hempen fabrics	Woolen fabrics
1924	425,724	91,534	746,241	34,599	202,390
1925	413,794	76,548	774,373	30,894	182,481
1926	426,914	67,460	743,315	23,346	205,252

Note:—Data on woolen textiles are given elsewhere.

(A) Cotton Fabrics

The apex of prosperity was reached in 1919, when the output amounted in value to over ¥1,034,000,000. Experiencing adverse turn subsequently many small shops for manufacturing stuffs for home consumption have been closed. The number of factories, operatives, etc. in the last few years is as follows:—

Year	No. of factories	Run by motive power	Daily average No. operatives	Value of output: Yen 1,000,000
1923	117,979	6,764	335,432	694
1924	107,243	6,433	318,178	746
1925	96,886	6,089	303,278	774
1926	76,248	—	296,233	743

Note:—Factories employing under 5 operatives are excluded.

Staple Products (In 1,000)

Wide

Year	White cloth (yards)	Striped stuff (yards)	Flannel (yards)	Crape (yards)	Total value incl. others
1925	1,350,930	93,097	232,274	72,524	¥556,219
1926	1,394,203	30,531	180,970	99,518	539,357

Narrow

	(Rolls)	(Rolls)		(Rolls)	
1925	87,459	38,578	—	2,161	¥203,284
1926	94,868	44,313	—	1,350	173,768

(B) Silk Fabrics

Of the silk piece goods for export the Fuji pongee, ordinary pongee and "habutaye" are three staples. The other silk goods exported are "kaiki," "chirimen" (crape), "kohaku," etc. The "kaiki" has fallen in repute owing to deterioration of quality. What is interesting is the fact that ordinary pongees are now extensively produced in Fukui and Gifu with yarns imported from China. The Fuji pongee is of recent origin for which the credit goes to the Fuji Gassed Yarn Mill. Made of spun silk, there are two varieties, heavy and light, the former resembling the Chinese pongee and the latter "habutaye," and though less lustrous is stronger. It is largely used for silk shirts. Other kinds of silk fabrics are mostly for domestic market, and generally produced by women by hand-machines. For costly fabrics as satin, silk crape, brocade, Nishijin (Kyoto), Kiryu, Ashikaga, etc. are noted. Kiryu in particular has made rapid growth as the manufacturing center of foreign-going articles. The two contiguous prefectures of Fukui and Ishikawa produce over two-thirds of the total output amounting to about 3½ million pieces for the whole country.

Official data on silk, and silk cotton fabrics are as follows:—

Year	No. of factories		Daily average No. operatives
	employing power looms	employing hand looms	
1925	10,457	100,097	237,059
1926	90,096		219,007

Staple Exports (in 1,000)

Year	Habutaye (yards)	Kabeori & Crapes (yards)	Satin (yards)	Pongee (yards)	Taffetas & Poplin (yards)
1924	1,967	8,399	8,330	—	454
1925	1,417	10,716	7,934	20,142	505
1926	1,476	16,369	8,736	26,910	1,228
1927	1,736	20,583	8,043	22,233	1,556

Note:—The greatest customers for "habutaye" are the U.S.A., England and France, those for satin, the U.S.A., China and India. About half of export crape goes to Australia and Canada while the bulk of pongee silk is taken up by the U.S.A.

(C) Woolen Goods

With a history extending more than a generation, for the first woolen cloth mill, the Gov. Senju Woolen Factory, was created in 1876, this is the most backward of all textile industries, owing to absence of all essential factors for the building up of the industry, i.e. absence of raw materials, machinery, and skilled labor. It was by turning out plain stuffs for soldiers and sailors' uniform and for similar purposes that the Government mill and the Goto mill, est. 1878, the only private enterprise in this line for long time, could keep running. The abnormal prosperity which this industry enjoyed during the war boom, for the Japanese woolen mills were even enabled to export no small quantity of cloth, serges, etc. to Russia and other markets which were cut off from supply of European goods, abruptly stopped with the cessation of the war. The Japanese mills have since been experiencing with growing intensity the pressure of foreign fabrics, principally English, which continued to arrive in large quantities, as the 25% specific duty as fixed in 1908 practically amounted to only 5 or 6 ad valorem considering the fact that the market price of the article had been trebled since the great war. In these circumstances Japanese mills have little hope, they plead, to produce thinner and finer quality. To give them shelter the tariff was afterward increased to 57.50-90.00 per 100 kin (subject to the 100% luxury ad valorem duty temporarily since August '24).

Leading Companies and Their Business Result

The leading companies of comparatively older origin in this particular line are:—

Nippon Keori (Hyogo-ken), Tokyo Keori, Tokyo Muslin, Toyo Muslin (Tokyo), Osaka Keori, Muslin Boseki (Osaka) and some smaller plants. The Muslin Boseki and the Tokyo Keori merged in the fall of '27, under the new name Godo Keori (Cap. ¥25 millions p. u.)

The rate of profit of 5 leading cos. for 1927 was as follows:—

Name of Cos.	Cap. p. u. (Yen 1,000)	Rate of Profit to Cap. (percent.)
Nippon Keori	27,500	25.1
Tokyo Keori	16,000	7.8*
Toyo Muslin	10,075	19.8
Muslin Boseki	16,250	11.6*
Tokyo Muslin	20,121	0.4
Godo Keori	25,000	12.7†

* for 1st half year. † for 2nd half year.

(D) Muslin-de-Laine

This industry is more favorably placed than that of heavier woolen stuffs chiefly because the Japanese mills in this line are less pressed by European rivals than in the case of the other, the goods are intended for wider circles of consumers and because they generally combine other lines, as manufacture of calico, cashmere, cotton yarns, etc. This light stuff as manufactured in France, Germany, etc. was originally intended for Far Eastern markets, but just as European cotton yarns of coarser grade were practically supplanted in time by the production of the countries which at first depended upon foreign supply, muslin-de-laine also met a similar fate at least as regards Japan. It was in 1905 that Japanese muslin-de-laine first appeared on the export list, 97,000 yards in all, as against the import that was returned in the same year at 11,363,000 yards.

After 1917 the import disappeared from the customs returns. Interesting to state the Prince of Wales' visit to Japan in 1922 has incidentally given a lift to the export of muslin to Europe and America in the shape of brightly printed "happy coat." About 400 packages valued at ¥600,000 of this fancy dress are said to go abroad every month.

Data on Woolen Fabrics

Year	No. factories employing power looms	No. factories employing hand looms	Daily average No. of operatives	Muslin in Yen 1,000	Flannel in Yen 1,000
1925	327	451	45,456	88,338	3,757
1926	867		36,219	86,684	4,483

Year	Serges (in Yen 1,000)	Blankets (in Yen 1,000)	Woolen cloths (in Yen 1,000)	Miscellaneous (in Yen 1,000)	Total incl. others (in Yen 1,000)
1925	13,108	7,424	16,360	20,990	182,481
1926	18,937	4,720	20,349	34,032	205,252

Import of Raw Materials (in 1,000)

Year	Tops		Wool	
	Kin	Yen	Kin	Yen
1924	8,089	26,281	44,635	61,760
1925	8,593	33,891	52,609	87,182
1926	6,411	18,005	54,791	68,020
1927	4,476	11,530	74,429	90,147

Staple Items of Exports and Imports (in 1,000)

	Export				Import			
	Cloths & serges		Blankets		Cloths & serges		Blankets incl. travelling rugs	
	S. yard	Yen	S. yard	Yen	S. yard	Yen	S. yard	Yen
1925 ..	190	502	1	183	14,423	38,494	133	774
1926 ..	205	600	1	220	8,668	19,882	102	446
1927 ..	271	687	1	133	8,040	21,388	71	331

Statistics on Muslin (In 1,000)

Year	Output (Yard)	Import		Export	
		Yard	Yen	Yard	Yen
1923	136,712	—	—	797	783
1924	139,279	—	—	1,659	1,592
1925	127,573	—	—	2,650	2,739
1926	142,010	—	—	2,117	2,063
1927	133,000	—	—	2,067	1,628

II. ELECTRIC AND GAS INDUSTRIES

A. THE ELECTRIC INDUSTRY

General Remarks

The first private electric Co. Japan ever had was the Tokyo Electric Light Co. that began to operate in 1887 and of course the power was generated by coal burning. It was not till 1891 that hydro-electric enterprise began to exist. Interesting to note, the successful canal work for leading the water of Lake Biwa to Kyoto, and completed in 1890, suggested this novel electric business. As might be expected, coal-burning current was at first far in excess of the volume of water-power, but with the growing rise of the price of coal, especially from about the close of the Sino-Japanese war of 1894-5, the attention of the enterprising public was more powerfully drawn to the advantage of white coal. The scope of work, however, was still very much limited owing to imperfect experience of our electric engineers and other causes. The success realized in 1907 by the Tokyo Electric Co. in transmitting from Yamanashi prefecture to Tokyo, 50 miles, 55,000 volts was a turning point in the history of electric engineering in Japan. In 1914 the Inawashiro Hydro-electric Co., subsequently merged in the Tokyo Electric Light Co., completed the far more ambitious work of transmitting 115,000 volts of super high pressure current from Inawashiro to Tokyo, 150 miles, and our engineers now sufficiently demonstrated their capability to undertake hydro-electric work of any magnitude.

Latest Development

In the amount of capital invested and in the rapid expansion of work the hydro-electric industry easily stands first among all the industrial enterprises of Japan. What specially marks it is the growing tendency shown lately of concentration of different companies under the control of a few big establishments. The Tokyo Electric Light Co. has absorbed several cos. and now it commands the total paid-up capital of about ¥350 millions, the largest corporation of all in Japan. The Toho Electric Power Co. of Tokyo has in a similar manner grown to a big concern of about ¥130 millions, while its sister co., now rival, Daido Denryoku (cap. ¥113 mil.) succeeded in March 1922 in transmitting 70,000 volts to Osaka from its plant at the river Kiso and also contemplates supplying Tokyo, a distance of over 300 miles. The lighting stage has been passed and the power stage has followed.

As may be judged from the natural features of the land the

districts forming the broadest section in Central Japan contain the most important heads for electric generation. The river system of Kiso exploited by Daido Elc. Co., of Kurobe by Nippon Elc. Power Co., and some other heads, all in the Alpine table-land, supply to Tokyo-Yokohama, Kyoto-Osaka-Kobe, and Nagoya districts, high pressure of about 154,000 volts. As regards the volume of water power available, the river Shinano stands first with 721,575 h.p. as average capacity per annum. Details are shown in the subjoined table.

Available Water-Power

The final researches conducted by the Government and concluded in 1923 estimate that the total volume of water power that can be developed from 2822 heads existing in Japan proper is 6,415,000 h.p. in drought, maximum of 14,093,000 h.p., at normal level and the yearly average 11,933,000 h.p. The electric undertakings in operation at the end of 1926 numbered 5,410, including both Government and private, and representing 1,902,000 k.w. for water power, 1,021,000 k.w. for fire-burning, total 2,923,000 k.w., besides 1,642,000 k.w. water and fire combined remaining uncompleted, so that Japan possesses theoretically immense reserve power awaiting exploitation.

Rivers and the Average Potential Amount of H.P.s per annum

The following table gives the names of principal rivers in the Eastern and Western zones with their average yearly amount of H.P.s, the rivers being divided for convenience into those emptying into the Japan Sea and those into the Pacific Ocean:

Japan Sea Group

Names of Rivers	Average Amount of h.p.s.	Names of Rivers	Average Amount of h.p.s.
Akano	586,243	Joganji	92,856
Hime	145,287	Mogami	213,785
Kurobe	311,220	Shinano	721,575
Kuzuryu	120,656	Sho	292,268
Jintsu	416,341	Tetori	80,464

Pacific Ocean Group

Names of Rivers	Average Amount of h.p.s.	Names of Rivers	Average Amount of h.p.s.
Abukuma	111,507	Kitakami	114,574
Fuji	288,872	Oh-I	151,546
Kino	72,187	Tenryu	594,062
Kiso	686,115	Tone	158,460

Dry Season.—The dry season comes twice a year in Japan for a short period both in winter and summer, when the available power of a Japanese river decreases about 40 per cent. from the normal. The average decrease of all rivers at any time is, however, estimated at 20 per cent. in Japan. The shortage during the dry season is met by auxiliary steam plants.

[illegible]



Largest Load Centres

The three largest load centres in Japan are Kei-Hin (around Tokyo and Yokohama), Chukyo (around Nagoya) and Kei-Han (around Kyoto, Osaka and Kobe).

The territory around the three centres may also be divided into two zones.

1. Eastern zone with centre in Kei-Hin district (Tokyo and Yokohama).
2. Western zone with centre in Chukyo district (Nagoya) and Kei-Han district (Kyoto, Osaka and Kobe).

These two zones are geographically separated by the Japanese Alps and the River Tenryu.

Large Transmission

The existing large transmission lines under operation are listed below:—

Name of Company and Transmission Line	Distance in Miles
Eastern Zone:	
Tokyo Electric Light Co. Inawashiro Line	140
Tokyo Electric Light Co. Joetsu Line	130
Kei-Hin Electric Power Co. Kohshu Line	125
Average Eastern Zone.....	132
Western Zone:	
Daido Electric Power Co. (sister co. of the Toho Co.) Suhara-Osaka Line	150
Nippon Elec. Power Co. Sasatsu and Osaka Line.....	190
Average Western Zone.....	170

Generation and Frequency

According to the investigation made by the Toho Electric Power Co., Ltd. the amount of power generated at different frequencies at the end of June of each year is as follows:—

Year	Kw. at 50 Cycles	Kw. at 60 Cycles	Kw. at Misc. Frequencies	Total
1912	117,000	137,000	60,000	314,000
1915	160,000	234,000	80,000	474,000
1917	290,000	297,000	104,000	691,000
1919	387,000	429,000	38,000	899,000
1921	504,000	708,000	194,000	1,316,000

Since June, 1921, the installation of the 60-cycle machines has surpassed that of 50 cycles, and it may be said that at present the ratio of 50- to 60-cycle power plants is 2 to 3.

Electric Machines and Apparatuses

Japan is now self-supporting in telegraphic and telephone apparatuses, electric fans, and similar minor articles; has so far

advanced in technical skill that generators of the size of 20,000 kilo-volt ampere, motors of several thousand h.p., motors for steel-rolling, weaving, etc. are turned out at such big works as Shibaura Works, Mitsubishi's Kobe Shipyard, Kawakita Works, Kuhara's Hidachi Eng. Works, etc. As in the case of dynamos described above, Japan is still obliged to import high-grade electric machines of foreign-make. An interesting sign of the times is the alliance recently effected between Japanese works and foreign makers, i.e. the Shibaura Works and the G. E.; the Tokyo Denki and the Westinghouse; Furukawa Firm and Siemens-Schuckert; and the Nippon Dento and the W. E. This alliance has proved highly beneficial to both parties.

Figures for the last three years available are as follows in ¥1,000:—

Year	Electric machines, etc.	Bulbs, etc.	Wires & cords	Total
1924	88,765	18,030	87,736	194,531
1925	98,918	17,586	104,620	221,125
1926	105,202	16,106	113,551	234,859

Supply of Power

With the steady demand for power for diverse chemical industries hydro-electric enterprises have made a striking progress. In 1915 the power supplied for all different purposes totalled over 486,000 h.p., to increase about four and a half times in ten years, i.e. to 2,087,000 in 1925.

Motors as classified by use are as follows for 1925:—

	No.	H. P.
Weaving and dyeing.....	45,629	307,494
Iron foundry and Mechanical ind....	36,425	348,666
Chemical industry	21,005	329,342
Comestibles and beverages.....	82,532	239,398
Mining and refining.....	9,755	506,519
Others	66,246	355,589
Total	261,592	2,087,008

Compared with the figures for 1915 the total h.p. has gained as much as 1,601,000.

Electric Light

Lamps installed were reported at the end of 1926 as 30,159,042 in Japan proper representing 547,918,369 c.p. These correspond to 49.5 lamps and 905 c.p. per 100 people or 3.0 lamps and 53.9 c.p. per household. Of the total lighting installations as existing at the end of the year those on metre system numbered 683,584,000. The six premier cities of Tokyo, Osaka, Kyoto, Kobe, Yokohama and Nagoya claimed 6,666,000 lamps representing 158,036,000 c.p., or about 39% of the total for the whole country.

Financial Aspects

As alluded before the electric industry occupies as regards the total capital invested the foremost place among all the industrial enterprises of Japan. With the marked development effect-

ed recently in the scope of work this particular economic activity has in fact become financially one of international importance. Indeed it has succeeded in inducing American and British capitalists to lend their spare hoardings, as shown in the Chapter on Finance. The following figures will show main financial features:—

Year	Gross cap. Yen 1,000	P. u. capital Yen 1,000	Con'dated capital Yen 1,000	Debentures & loans Yen 1,000	Profit Yen 1,000	Ratio to p. u. cap.
1919	1,065,886	762,124	859,300	172,726	88,116	11%
1924	2,615,582	2,012,205	2,466,586	760,327	217,249	11%
1925	2,813,900	2,218,600	2,769,100	1,070,900	252,977	11%

The investment classified by kind of business makes the showing for 1925 (in unit of ¥1,000):—

Kind	No. of un- dertakings	Gross cap.	P. u. cap.	Consolid- ated cap.	Debentures & loans
Electric supply	606	1,002,404	765,017	1,068,343	504,367
Electric R'ly.	85	239,256	154,193	174,052	72,792
Two combined	49	1,572,261	1,299,439	1,256,701	493,721
Total	740	2,813,921	2,218,649	2,769,096	1,070,879

Rating

Rating for lighting and supply of power has on the whole made perceptible increase in recent years, as shown below:—

Year	10 c. p.	16 c. p.	1 kw. hour
1926	74.4 sen	89.4 sen	20.0 sen
1927	74.3 "	88.6 "	20.2 "
1919		65.4 sen	81.0 "
1920		78.0 "	90.0 "

Supply of Power

	Daytime 1 h. p.	1 k. w.
1926	¥8.76	7.1 sen
1927	8.68	7.1 "

The Electro-Chemical Industry

In the pre-war days this particular industry was confined to the production of galvanized copper, calcium carbide, nitrogen-fertilizers, etc., but at present the sphere of work comprises other fields, i.e. iron and steel foundry, and manufactures of alloy, cement, bleaching powder, potassium chlorate, etc. The high water mark was attained in 1918 when the output represented ¥166 millions, but it has dropped subsequently. The total output in 1926 amounted to ¥107,415,000 of which the bulk consisted of only two items, i.e. copper and gold-silver amounting to ¥54,940,000 while calcium carbide, nitrogen and ammonium sulphate were valued at ¥33,239,000. Important projects have recently appeared to turn the excess power to greater advantage by utilizing it for the production of nitrogen, ammonium sulphate, etc.

Business Result of the Electro-Chemical Industry

Year	Subscribed Capital (Yen 1,000)	Cap. p. u. (Yen 1,000)	Reserve (Yen 1,000)
1924	16,500	11,899	1,842
1925	17,500	16,350	1,466
1926	35,000	18,970	1,725

B. THE GAS INDUSTRY

Enactment of the gas industry law in 1923 has had beneficial effect on the development of the industry, as it entitles a gas company to appeal to the Government whenever a public body unreasonably interferes with its plans for making reasonable expansion of business. For lighting purposes gas has been much encroached upon by electricity, but what has been lost is more than compensated for by steady increase of consumption for cooking and other household necessities. It is believed that by effecting proper improvement in generation and piping the business can be made far more profitable. Then the chief by-products, coke and tar, instead of being again reduced to gas, should be utilized to greater advantage. The average caloric quantity in larger cities is 400 B.T.U. on the average, and the charge per 1,000 c.f. is from ¥2.50 to 2.80.

The relative proportion of gas for different purposes is shown below:—

Year ended	No. of lamps	Heating installations	Motor installations	Motive h. p.
Mar. 1922	1,224,776	1,009,847	956	9,938
„ 1923	1,163,641	1,194,330	867	9,415
„ 1924	518,624	1,087,472	559	6,616
„ 1925	609,005	1,256,178	497	6,648
„ 1926	2,043,829		429	6,638

The situation of the industry is as follows:—

Year ended	No. of works	P. u. capital (Yen 1,000)	Production (1,000 c. ft.)	By-products	
				Coke (English ton)	Coal-tar (koku)
Mar. 1922.....	75	276,272	10,822,831	470,699	174,919
„ 1923.....	74	416,156	12,263,347	493,260	192,268
„ 1924.....	76	507,202	12,464,330	437,769	197,855
			(cubic meters)	(Fr. tons)	(1,000 ft.)
„ 1925.....	73	552,652	408,419,059	517,636	38,127
„ 1926.....	75	691,824	423,932,643	593,818	43,726

Balance Sheet

Year	Profit (Yen 1,000)	Ratio to p. u. cap.	Dividend (Yen 1,000)	Per cent.
1923	9,193	27.9	2,680	8.1
1924	4,390	12.8	3,182	9.4
1925	4,798	14.6	3,083	9.3
1926	5,888	15.3	3,795	9.9
1927	6,981	15.9	4,343	9.9

III. MECHANICAL INDUSTRY

A brief survey of the situation of some of the important mechanical industries in Japan will be given in this section, the information being based on the latest edition of the Kogyo Nenkan (Industrial Year Book) published by the Kosei-kai, Tokyo.

Motors

Water-wheels.—The Dengyo-sha, Hidachi Works, and Okumura Electric Co. are principal makers in this line, the machines now turned out by them being of high-grade quality and developing tens of thousand kilowatts. The growing activity of water-power exploitation at home and in neighboring countries gives a good promise for the future of this particular mechanical industry.

Steam Turbines.—For turbines of various types of excellent make the Mitsubishi and Kawasaki Shipyards, Osaka Iron Works, etc. are noted. The Navy arsenals are no less active in this work so that the home manufacture is now sufficient to meet the requirements of warships. The native makers can now turn out turbines of over 10,000 kilowatt capacity for use other than marine.

Diesel Engines.—In petroleum semi-Diesel engines, especially those of 30 to 100 H.P. capacity made by the Niigata and Ikegai Iron Works are of wide repute as motors equipped to fishing vessels and have largely contributed to the recent development of the fishing industry. It is significant to note that the Niigata Iron Works has secured the patent right of Millies Vicker Co. of England and the Kobe Steel Works that of Sulzer Co. of Switzerland, and are manufacturing turbines of over 600 H.P. of these special types.

Smaller size petroleum engines for agricultural purpose are in great demand recently, the Kubota Iron Works and Tobata Company being leading manufacturers in the line.

In air engines Japan has practically attained a stage of self-supply, and the Army arsenals and the Mitsubishi Air Craft Co. (formerly Internal Combustion Engines Works) are now turning out engines of Salmson, Hispano-Sulza and Nevia type of excellent make and efficiency.

Electric Apparatuses, Machines, etc.

The leading concerns with paid-up capital of over one million yen in this industry are the Shibaura Engineering Works, Hidachi Works, Mitsubishi Electric, Okumura Electric, Fuji Electric, Kawakita Electric, Yasukawa Electric, etc. The number of workers employed by these and other smaller establishments reached 21,298 in 1926. The annual output for the three years ending 1926 is as follows (in ¥1,000):—

	1926	1925	1924
Dynamos and electric dynamos..	23,653	29,143	13,534
Motors	21,071	16,185	14,922
Transformers & other electric apparatuses	69,797	63,805	60,618

In the manufacture of electro-meters, indicators, other electrical supplies and telegraphic machines the home industry has already reached the stage of self-sufficiency. The Shibaura Engineering Works and Tokyo Electric Co. are well known for their meters of the American General Electric Co. and the Ashida Works those of the American Sangamo Electric Co. The Yokokawa, Tokyo Keiki, Kyoritsu Denki, Nippon Denki, Kuwano Denki, Nisshin Denki and Shikishima Denki Cos. are leading makers of indicators, while telegraphic and wireless apparatuses are turned out at the Oki Denki, Kyoeki Denki, Annaka Denki, Nippon Musen, Tokyo Musen and Yoshimura Cos. The bulk of telephonic apparatuses is also supplied by home manufactures, only a small portion being imported. Leading factories in the line are the Nippon Denki, Oki Denki, Kyoritsu Denki, Kyoeki Denki, Kawakita Denki and To-A Denki Cos. Before the Japan-China war of 1894 the production hardly exceeded 1,000 a year, whereas the annual output at present exceeds 100,000.

Batteries.—The investment in the business aggregates about ¥9 millions (¥7½ millions of storage batteries and ¥1½ millions of dry batteries). The Nippon and Yuasa Battery Cos. are specialized in storage batteries and turn out about 80 per cent. of the production, their manufactures going to China, India and Australia. The production of dry batteries is centred about Tokyo and amounts to ¥3½ millions a year, of which some 10 per cent. is exported to China, South Seas, etc.

Electric Wires and Cables.—The annual production is valued at 70 million yen or so and the factories identified with the business are Furukawa Electric, Sumitomo Electric, Fujikura Electric Wire, etc.

Spinning & Weaving Machines.—Noted makers are the Toyoda, Harada and Enshu Shokuki Cos., the first-named being especially known as the only factory capable to turn out the whole range of the spinning machinery. Its working capacity is about 60,000 spindles a year. After all foreign-made machinery is still predominant in Japan, about 5 million spindles in operation being of foreign origin.

Bridge Materials.—These are made by the Ishikawajima Dockyards, Kisha Seizo Kaisha, Kawasaki Dockyards (Hyogo), Yokokawa Works (Tokyo & Osaka), Osaka Iron Works, Mitsubishi Dockyards (Kobe), Uruga Dockyards, etc., and their annual production is estimated at 200,000 tons.

Locomotives & Rolling Stocks.—The industry in the line has made strides and the number of factories has considerably increased. The Japan made locomotives are now extensively used on the Government railways and in Chinese railways and are by no means second to foreign ones. The oldest and foremost in the line is the Kisha Seizo Kaisha of Osaka, followed by Japan Car Mfg. Co., Kawasaki Dockyards, Hidachi Works, Mitsubishi Dockyards, and others, their total capacity reaching 450 cars (about 40,000 tons) a year. The Hidachi Works, Mitsubishi and Kawasaki Dockyards have recently started manufacture of electric locomotives, and several 1,200 H.P. locomotives made by the Hidachi Works are employed on the State lines. In passenger and freight car building the Government railways works, the Kisha Seizo Kaisha and Japan Car Mfg. Co. stand high, their combined manufacturing capacity reaching 2,500 passenger cars

and 10,000 freight cars each of 1-ton capacity in a year. For motors and brakes for electric cars, there are the Government Rly's O-I factory, Shibaura Engineering Works, Hidachi Works, Mitsubishi Electric Eng. Co., Kawasaki Dockyards, etc. The Mitsubishi Electric Co. and Japan Air Brake Co. are manufacturing air brakes of American type, while the Sumitomo and Kobe Steel Works supply automatic couplers of excellent make.

Motor Cars & Cycles.—The Ishikawajima Dockyards, Kaishinsha, Hakuyosha and Tokyo Gas Denki Kogyo Co., stand in good repute for producing passenger and freight cars, while as makers of motor cycles the Katsu Factory, Rissoshsha and others are well known.

Optical Instruments.—The Nihon Kogaku Industrial Co. is credited for excellent optical implements, surveying machines and other scientific implements.

Mechanical and Engineering Productions in 1926

(¥1,000)

Ships	62,593	Electric apparatuses ...	43,456
Cars, etc.	71,708	Metres, gauges, etc....	6,205
Pumps, cranes, etc....	16,179	Clocks, watches, etc....	9,576
Machine-tools, finishing machines, etc.	104,396	Arms, etc.	—

Dynamos.—The following figures show the output of principal products in this line at such leading works as the Nagasaki and Kobe Dockyards of the Mitsubishi Firm, the Kawasaki Shipyard at Kobe, the Kobe Iron Works, etc. (in ¥1,000):—

	1926	1925	1924
Boilers, steam turbines.....	1,613	1,648	1,329
Steam engines	21,071	16,185	14,922
Pumps	7,488	6,811	7,146
Electro-motors	23,653	29,143	13,534
Gear-wheels	10,626	5,218	1,330

Import of Dynamos, etc. (¥1,000)

	1927	1926	1925	1924
Boilers, economizers	3,285	5,736	6,357	6,118
Steam turbines	1,242	2,562	1,452	2,298
Steam engines	20	32	60	32
Oil and gas heating engines....	5,091	4,398	5,732	5,572
Water-wheels	517	2,209	773	1,463
Total	10,155	14,937	14,374	15,483

Mechanical Industry in Customs Returns

Exports

Machines and parts, steamers and marine engineering-machines, transportation machines, railway rolling stocks, watches, scientific instruments:—

1924	¥18,759,984	1926	¥25,184,675
1925	29,655,821	1927	26,952,535

Miscellaneous metallic products:—

1923	¥317,496	1925	¥421,350
1924	378,564	1926	447,058

Principal items of exports are as follows:—

	1927	1928
Clocks	¥2,076,505	¥1,765,682
Musical instruments and parts..	480,344	594,070
Bicycles and parts.....	461,671	684,123
Ships and machinery.....	1,403,903	389,414
Electric machines	2,240,248	2,099,076
Telephone	296,143	251,135
Spinning and weaving machines	2,878,530	2,623,673
Miscellaneous articles, parts and fittings	74,885,129	82,307,437

Imports**Machines and parts:—**

1924	¥128,522,756	1926	90,470,234
1925	88,996,489	1927	78,611,809

Steamers and marine engineering machines, railway rolling stocks, transportation machines:—

1924	¥46,016,246	1926	¥30,447,170
1925	26,313,435	1927	27,550,166

Scientific instruments and guns:—

1924	¥26,067,286	1926	¥20,930,903
1925	31,757,663	1927	17,066,898

Principal items of imports are as follows:—

	1927	1928
Gas, Oil, Hot air Engines.....	¥5,090,732	¥4,398,354
Water turbine and Pelton wheels.....	517,011	2,209,410
Boiler and fittings	2,181,471	4,875,281
Air and Gas compressors.....	1,637,075	1,970,851
Cranes	96,603	808,600
Electric generators and motors.....	7,030,207	10,690,293
Metal working and wood working machinery	4,985,827	3,042,576
Spinning machinery	10,204,753	8,166,776
Paper making machinery.....	254,671	900,561
Sewing machinery	6,583,263	3,620,102
Railway cars and parts.....	1,443,916	1,553,252
Automobiles and parts.....	8,063,062	5,324,535
Watches and parts.....	7,836,016	10,079,019
Bicycles	1,728,301	2,782,211
.. parts	1,799,333	3,141,919
Locomotives and tenders.....	927,222	3,889,393
Scientific instruments	17,066,898	20,930,903

Capital, Factories and Operatives

The figures for 1926 showing the financial aspect of companies devoted to this industry and works employing 50 operatives or more are as follows:—

	No. of cos.	Sub. Cap. (Yen 1,000)	Reserve (Yen 1,000)
Joint stock	534	660,110	136,062
Partnership	655	21,078	1,004
Total	1,189	681,187	137,076
Electric machines and tools.....	228	226,216	31,795
Vessels and Rolling stocks.....	192	279,190	59,814
Manufacturing and finishing			
machines	269	73,217	4,541
Machines and tools for technical use	134	47,108	3,872
Total	823	625,731	100,022

In 1926 the operatives numbered 305,996 of which 236,051 were in private and 69,945 in Government works, the male workers claiming 292,009 or 95 per cent.

Working Result in Recent Years

According to the investigations of the Oriental Economist, the average working result of 7 leading companies engaged in mechanical industry is as follows:—

Working Year	Annual rate of profit per cent.	Dividend per cent.
1923 { 1st term.....	1.59	0.88
{ 2nd "	1.68	0.54
1924 { 1st "	1.55	0.68
{ 2nd "	1.21	0.63
1925 { 1st "	1.04	0.85
{ 2nd "	1.01	0.85
1926 { 1st "	1.00	0.78
{ 2nd "	0.98	0.65
1927 { 1st "	0.34	0.20
{ 2nd "	0.37	0.21

(For details on the shipbuilding industry refer to the Chapt. Shipping and Shipbuilding.)

IV. CHEMICAL INDUSTRY

GENERAL SITUATION OF NEWLY STARTED CHEMICAL INDUSTRIES

The bio-chemical industry has made a fairly good progress after the European war. Of over 800 brands of new medicines now on the market about 350 are of foreign origin and the rest Japanese manufacture.

Soda-ash

It was through the self-sacrificing efforts of the Asahi Glass Co., the largest in this line in Japan and run by the Mitsubishi Firm, that Japan was first able to produce soda-ash when its supply was cut short by the world war. The Co. is now able to produce about 7,000 Eng. tons a year. From the commence-

ment. In April 1922 the experiment cost, it is said, about ¥3½ millions.

The native article had to face the formidable competition of Brunner Mond's production and also the African Magahdi natural ash. The latter was quoted early in 1922 at ¥3.20, and the other slightly lower. The pre-war quotation of the English production was ¥3.50, and this is a rate which the Asahi can hardly offer to its customers. The Co. therefore petitioned the authorities in 1922 to raise the tariff from 35 sen per 100 lb. to ¥1.16, but the other glass-manufacturers opposed, so that the matter is still left in suspense. It should be added that the Asahi has the advantage, if advantage it is, of using its own ash at its glass-works.

The primary drawback in the soda industry of Japan is the absence of cheap industrial salt. To make Japan's soda industry self-sufficient, something like 100,000 tons of soda must be produced per annum, this requiring 200,000 tons of cheap material. The supply now comes mainly from Shantung and Spain. The import of soda in 1927 amounted to lbs. 208,051,000.

Caustic Soda

The production of caustic soda in Japan increased every year from 1920 to 1925, the output in 1925 reaching 57,806,000 pounds. A change came over the situation in 1926 when the output decreased about 6,000,000 pounds due to smaller demand for bleaching powder, the by-product of caustic soda, and the marked increase of soda imports. The production in 1927 however increased to 55,147,000 pounds.

Import of caustic soda in 1927 totalled 90,993,000 pounds, a high record showing a gain of about 41,752,000 pounds over 1925 and double the total of 1923. Partially due to the restricted output enforced since July '25, the consumption of both goods has gradually increased, bleaching powder from larger production of paper and establishment of new pulp factories, and caustic soda from the recent development of rayon and other fibre industries. Notable is the increase of demand for caustic soda it swelling to 162,132,000 lb. in 1926 from 20,000,000 of 1920 and 82,000,000 of 1924.

The following statistics shows the amount of production, import and export of caustic soda for the five years ended 1927:—

	Production	Import	Export	Consumption
1923	42,746,378	44,099,868	364,000	—
1924	47,812,962	34,642,400	153,198	—
1925	55,591,401	49,230,909	480,401	78,271,000
1926	51,762,064	80,462,666	93,599	66,831,000
1927	55,147,000	90,993,000	120,000	79,471,000

The maximum working capacity of all the existing plants is estimated at lb. 58 millions against the home consumption that is fast increasing since 1923, the figure for 1926 reaching lb. 162 millions against lb. 20 millions of 1920. The Dai-Nippon Fertilizer Co., Asahi Glass Co., Hokkaido Soda Co. and others are noted in this industry.

Bleaching-powder.—The output in 1927 was 85,219,000 lb. of which 79,471,000 was consumed at home and 5,749,000 (6%) was exported.

CERAMICS

Porcelain and Pottery.—In the production of foreign style crockery for export Aichi-ken, where Seto, the most flourishing centre of this industry in Japan, is situated, ranks first. Its total output, domestic and foreign consumption combined, amounts to ¥32 millions, or about 50% of the total for the whole country which in 1926 amounted to over ¥73,971,000. The leading establishments are the Nippon Toki, Nagoya Seito, Matsumura Koshitsu Toki (Hard Porcelain), etc. Other centres are Gifu-ken which supplies 12% of the total value; then follow Kyoto noted for decorative wares and Arita (or Imari in Saga-ken), Banko (Miya-ken) and Kutani (Ishikawa-ken), etc.

Bricks, Tiles, Clay-pipes and Shippo (Enamel ware).—These are self-sufficient as to supply, and Shippo has a leading centre in Aichi (vide Chap. Arts and Craft). The Shinagawa White-Brick Co. and Kanamachi Brick Co. are leading factories in this line. **Production (in ¥1,000)**

Year	Porcelain & pottery	Shippo	Fire proof & ordinary brick	Tiles	Clay pipes
1924	68,533	467	14,635	52,205	4,926
1925	78,178	401	15,040	48,193	3,739
1926	73,971	168	14,738	38,704	3,553

Glass and Glass Ware—The glass industry has escaped with comparatively small damage from the post-war slump. The output of glass and glass ware increased from about 7 million yen in the pre-war years to ¥64,360,000 in 1919 and 56,231,000 in 1920, though lately it declined to ¥52,529,000 in 1924 and ¥50,542,000 in 1925. The manufacture of plate glass has taken a long stride, and the Asahi Glass Works has recently started the manufacture of thick plate glass for railway cars, etc., and almost exclusively controls the sheet glass industry, while the Nichi-Bel (American-Japanese) Plate Glass Co. recently created also manufacture plate glass for windows, looking-glasses, etc. The export of glass and glass ware reached ¥16,631,429 in 1927 including window glass ¥60,380, bottles ¥4,358,367, glasses ¥2,210,350, beads ¥4,051,599, looking glasses ¥2,524,710, etc.

Cement—The statistical abstract of the industry, is as follows:—

No. of companies, 17; no. of factories, 31; normal capacity, 20,652 thousand barrels; companies credited with output of over 1 million barrels are, Asano, for about 80 millions, Onoda for 4, Iwaki, Toyokuni, Oita, Nippon, and Chichibu about 1 or over each. Annual production is between 18,500,000 and 20,000,000

barrels. Contemplated new or expansion projects represent over 9 million barrels of which the high grade plan contributes a larger half.

The industry which at one time suffered from overproduction recovered buoyancy after the earthquake disaster of 1923, owing to the activity of the building industry, hydro-electric and reconstruction work and the scarcity of stock in hand. At one time brisk business favored the commodity in the midst of general depression. A setback, however, occurred in 1926 when the demand began to wane while the completion of expansion work continued to increase the output resulting in oversupply partially caused by the arrivals of foreign products. In '27 the home demand was not particularly bad but exports fell below the preceding year. Then the keen competition among the manufacturers to dispose of their stocks in view of the tight money has seriously affected the market prices. Since July '27 a reduction of output by 35% to 30% has been enforced, limiting the production for 1928 to 14,000,000 barrels, so that the stock is gradually lessening while demand is going strong. At the quotation of ¥6 to ¥7½ per cask net on the home market the manufacturers enjoy a margin of ¥1 to 2. On the other hand, owing to the competition of the German and English Portland cement in India and the South Seas, the Japanese exporters find the F. O. B. quotation reduced to ¥4¼ or 5, and the foreign market practically closed for them. Production in 1926 and 1927 was 18,610,000 and 20,747,000 barrels respectively.

SUGAR

Japan has at present two centres of sugar production, Okinawa or the Luchu archipelago in Japan proper, and Formosa. In the former there are 11 mills with the total capacity of 3,550 Eng. tons while Formosa has 59 mills with the capacity of 53,111 tons in 24 hours. The sugar industry of the homeland is inseparably connected with that in the other, which will be described in the chapter on Formosa, not only on account of the supply of crude sugar from the southern island, but because of the fact that the refining business as conducted in the homeland is practically undertaken by the sugar cos. which possess their own mills and plantations in the island. Before the European war there were only five refineries in the homeland with the dissolving capacity of about 890 tons in 24 hours, but since then the figures have been increased to over 1,810 tons. The production of sugar has suddenly increased from about 1907, the yearly output in recent years amounting to 9 million piculs or more. At the same time, the consumption is also increasing with the growth of population, approximately 12 million piculs being consumed annually. The deficiency of the home production is supplemented by the imports from Java, the Philippines, and Cuba.

Sugar production in Formosa for 1927-28 season totalled 9,667,618 piculs, a record high amount since the occupation of Formosa by Japan. The consumption at home in 1927 reached as much as 13,297,000 piculs, but as the prices remained low and also owing to arrival of foreign product at lower figures the

Formosan sugar manufacturers are in difficulty and there are some cos. that have had to cut down their dividends. The official estimate of the Formosan sugar production for the 1928-29 season is 11,853,211 piculs, the highest on record and showing a gain of over 2,185,000 piculs on the previous season's figure. 2,631,757 piculs were shipped abroad in 1927.

Demand and supply of sugar in Japan for 1924, 1925 and 1926 were as follows (in 1,000 piculs):—

Supply

	1924	1925	1926
Brought forward	455	181	168
Production (in Japan proper) ..	1,525	1,606	1,693
Imports	7,564	6,352	5,092
Imports from Formosa	7,488	7,238	7,234
Total	17,032	15,377	14,187

Demand

Exports	3,063	2,450	1,909
Exports to Japan's territories ..	228	213	259
Consumption	12,681	12,259	11,838
Total	15,972	14,922	14,006
Carried forward	1,069	455	181

Raw Sugar.—The supply of crude sugar being insufficient in Japan proper the refineries use the raw material from either Formosa or Java. The recent figures on the refining business are given below:—

Refined Sugar (Japan Proper)

(in 1,000 "kin")

Year	Production	Home consumption	Export	Import
1923	130,222	1,152,114	105,757	500,643
1924	169,367	1,212,846	188,170	509,278
1925	152,521	1,251,979	238,805	632,280
1926	164,993	1,332,923	306,213	758,537

Amount of Raw Sugar Used

Year	(1000 kin)	Year	(1000 kin)
1923	624,558	1925	693,814
1924	724,239	1926	559,550

The question of supply of raw sugar has grown more and more serious not only because of the smaller average yield per acre of the Formosan plantation than that of Java but of the fact that the tendency is gaining force in Formosa for the sugar farms to be converted into more profitable rice paddies. The sugar percentage of the Formosan cane, too, has so far been below that of Java. To meet this insufficiency, Japanese refiners have started both the southward and northward expansion; i.e. establishment of sugar mills in Java, Sumatra and other South Seas islands on one hand and beet-root cultivation in Hokkaido, Korea and South Manchuria.

Beet-Root.—It should be remembered that the beet-root sugar industry is no novel affair in Japan, for it was first attempted in Hokkaido by the Colonial Government in 1879 and by a private co. in 1888. Both attempts failed and were wound up, the failure principally attributed to the ill-chosen position of the farms, i.e. in the districts subject to comparatively heavy rain in the harvesting season. The subsequent inquiries and experiments having proved that the districts of Kitami and Tokachi are free from this disadvantage, the two beet-root cos. that were established after the Armistice have chosen their farms there. So far the results have been fairly satisfactory. There are four beet-root cos., with the total subscribed capital of ¥32½ millions, of which ¥13½ millions is paid up, and with the working capacity of 2,300 tons, besides 600 tons of refined sugar.

The Tariff Question.—It would be hard for Japanese sugar refiners to compete with the imported commodity were it not for the enforcement of the protective duty of ¥2.50-5.30 per 100 kin on the latter. At one time the home refiners were able to import crude sugar free by way of rebate when it was refined in Japan, but this measure having been strongly opposed by the Formosan sugar factories, the imported crude sugar is now subject to a slight duty.

Sugar Companies (Japan Proper)

	Capital subscribed (Yen 1,000)	Capital paid up (Yen 1,000)
(1) Dai-Nippon (with 5 refineries at Tokyo, Osaka, Fukuoka, Formosa and Korea)	51,415	34,742
(2) Taiwan (with 2 refineries at Kobe, and 1 at Fukuoka)	63,000	38,100
(3) Meiji (with 2 refineries at Kawasaki and Tobata)	48,000	24,300
(4) Teikoku (1 refinery)	18,000	12,466
(5) Nitaka (1 refinery)	28,000	10,750
(6) Ensuiko (1 refinery)	58,500	28,218
(7) Taisho (2 refineries at Tokyo and Nagoya)	7,000	5,425

The combined total of the paid up capital, profit, the rate of profit and dividend of the seven leading concerns for 1927 are as follows (in ¥1,000):—

	1927	
	1st half	2nd half
Paid up capital	139,604	153,626
Profit	14,803	14,342
Rate of profit	20.4%	18.0%
Rate of dividend	13.7%	12.1%

In the summer and autumn of 1927, the Dai-Nippon combined and absorbed the Toyo and also took over the business management of the Nitaka Co.; the Meiji purchased and absorbed two factories of the Toyo Co. in Formosa; the Ensuiko Co. also purchased the Rinhongen and Koshun Cos. in Formosa and further absorbed the Tokyo Sugar Co.

ARTIFICIAL FERTILIZERS

The growing importance in Japan of the use of chemical fertilizers in preference to those of natural origin has stimulated the enterprises for the fixation industry aimed at producing sulphate of ammonia and nitrogen compounds. At present there are four companies for turning out the latter with the output of about 75,000 tons, of which 45,000 tons come from the Electro-Chemical Co.'s works. The manufacture of sulphate of ammonia is more active and totals 185,000 tons of which the Japan Nitrogenous Fertilizer Co. supplies 100,000 tons. There are other projects in this line with prospective output of 200,000 tons. It may be noted that the acquisition of the Haber's patent during the World's War has done much for the development of this chemical industry in Japan.

As quick-acting fertilizer sulphate of ammonia is judged to be better suited than bean cakes for Japanese soil, the frequency of rain-fall in Japan seriously affecting the effective power of more enduring fertilizers. Moreover, beans as manure are more costly than the sulphate, so far as the nitrogenous value is concerned, and it seems that they will in future be better utilized as foodstuff instead of as manure. The sulphate that used to come mostly from England and America is now principally supplied by Germany which sold to Japan in 1927 over 50% out of the total arrival of 250,000 tons.

MATCHES

On the strength of relative cheapness Japanese matches once gained in importance in export trade, but of late the advance of the price of raw materials and higher wages at home caused a setback especially as regards exports. Of about 100 factories at present existing the Toyo Match Co. is the biggest, contributing about $\frac{1}{2}$ of the total output which amounted to 298 million doz. in 1924. The Nippon Match Co. and two other plants were purchased and absorbed by a Swedish concern (Diamond Co.) in 1924.

Year	Production 1,000 doz.	Value Yen 1,000	Exports 1,000 gross	Value Yen 1,000
1922	336,326	18,951	20,837	15,563
1923	290,361	14,811	15,250	10,650
1924	297,444	15,794	12,457	9,213
1925	289,671	16,988	12,860	8,735
1926	239,048	14,863	12,195	6,897

In 1920 the industry suffered from oversupply chiefly due to the dwindled domestic consumption and slackened export to China, India and other places and of competition offered by foreign matches on the American market.

DYE-STUFFS

Under Government encouragement many companies and private establishments either old or new, such as the Japan Dye-stuff Co., Osaka Chemie Co., etc., were created soon after the out-

break of the Great War and began to produce dyestuffs either exclusively or as subsidiary work. By 1918 they were in position to export Japan-made dyes, as sulphuric black, methyl violet, congo red, etc., mostly to China. Meanwhile foreign dyes reappeared on the market, about ¥24 millions both in 1918 and 1919, to increase to ¥34,441,700 in 1920 and 32,082,500 in 1921, apart from the 488,793 kil. of the German indemnity dyes that arrived in May 1921. Though the ad valorem duty was raised to 35% in 1920 these foreign productions almost strangled the infant industry.

As a measure to protect the home industry the import duty on basic, direct, acid, mordant, acid mordant, sulphuretted and vat dyes and oil soluble dyes was increased in 1926 to ¥78.00—188.00 per 100 kin; meanwhile measures were taken to restrict the imports of over 40 specified dye-stuffs such as congo red, sulphur black, rhodamine B extra croceine scarlet, mordant yellow, etc. At present the Japanese industry can meet the home consumption as regards aniline salt and sulphur black dyes, amounting to 1 million and 5 million kin respectively, besides supplying about one half of the consumption of aniline and alizaline dyes amounting to 3,500,000 kin annually. The Japan Dye-stuff Co. and Miike Dye-stuff Factory have recently successfully effected the experimental manufacture of artificial indigo, which Japan consumes to the extent of 1,500,000 kin annually.

The new Japan-German Treaty concluded in 1928 has made a special arrangement as regards dyestuffs, but it is feared that it will not sufficiently protect our infant industry. German manufacturers are believed to adopt clever policy of dumping those articles which are produced in Japan and to sell dear others not yet self-supplied. Moreover it is practically impossible to expect effective control over suspicious cases of change of nomenclature, grading, and so forth made by shippers or importers to evade the restriction agreed upon. The outlook of this industry is deemed, therefore, to be highly gloomy.

BREWERIES

The brewing industry in Japan comprises "saké," beer and soy, for wine is still insignificant and as yet enjoying the benefit of nontaxation. The two indigenous industries of "saké" and soy are still primitive in process, and various new methods, several of them patented, have so far failed, especially as regards soy.

Saké.—For "sake," the national liquor brewed from rice, "Five villages of Nada (Hyogo-ken) situated about midway between Osaka and Kobe, are the most noted centre of production in Japan. What is interesting is that the fame of "Nada saké" is generally attributed not to any improved process of brewing but to the peculiar quality of water in certain wells existing in the five villages. The general opinion is that the bacilli found in the water possess the virtue of imparting a peculiarly agreeable flavor to the liquor. One defect of the "saké" industry is that it is difficult to keep its quality unimpaired beyond a few months, and to brew it all through the seasons, winter being now the principal time for brewing it. With the object of removing such defects Government started in 1904 an experimental laboratory at

Oji, a suburb of Tokyo, with the object of brewing the liquor all the year round. A further development made was more remarkable as it consists in manufacturing "saké" by synthetic process by dispensing with rice altogether. It was discovered by Dr. U. Suzuki, Gov. Physical and Chemical Institute. The process, though saving 5 million "koku" heretofore required, still remains an experimental success, its practical adoption being feared to have dislocating effect on the existing industrial and financial scheme. "Shochu," a Japanese alcohol made from rice, and also a small quantity of alcohol are produced. Leading centres are Nada, Fukuoka, Hiroshima, Kyoto and Aichi.

Recent statistics are as below:—

Output at leading centres, Sept. 1926

1,000 "koku"—Hyogo, 765; Fukuoka, 304; Hiroshima, 251; Kyoto, 299; Okayama, 165.

Total output (assessed) in Japan proper, Sept. 1926

Output, 5,795,580 Tax, ¥170,917,450 Breweries, 11,174.

Beer.—Beer-brewing was first started early in the Meiji era by an Englishman in Yokohama, and this was followed by a Japanese brewery in 1873 at Kofu. The business was also introduced about 1876 to Hokkaido under the tutelage of German experts and with the supply of foreign materials. However, it was not till 1893 that the industry had reached the stage of self-sufficiency and to produce enough to send the goods to the neighboring markets. The following figures will explain the recent situation of the industry:—

Output, Consumption, Export, etc. in "koku"

Year	Output	Consumption	Export	Import
1923	805,905	768,173	23,752	negligible
1924	874,573	892,291	22,181	"
1925	827,414	810,007	17,407	"
1926	817,137	794,621	22,516	"
1927	803,129	765,729	37,400	"

The output in 1927 is distributed as follows:—

Dai Nippon 448,236 "koku," Kirin 189,904, Nihon Beer and Mineral Water 73,028, Teikoku 70,712, Nichi-Ei 21,249. The marked decline of export in 1925 is explained by the competition of the German and British brands in India and the South Seas. The Beer Law as amended in 1908 allows use of rice, maize or sugar, to produce beer of mild taste and free from turpidity, and the Rebate Law on Liquors is now applicable on export beer. At present the raw materials are supplied at home, though hops and corks are imported.

Soy.—For the manufacture of soy Chiba prefecture heads all other places on the list as to output. Principal manufacturing centres are Noda and Choshi. Parched wheat mixed with salt and beans is a principal ingredient. The process is still far from scientific, requiring about 12 months before the liquid is ready for sale. It is also costly, as it does not much admit labor-saving appliances. To obviate these disadvantages have been tried several patented processes, but most of them have failed. In

1917, the leading soy manufacturers at Noda combined and formed the Noda Soy Co., capital ¥7,000,000 p. u. with capacity of about 250,000 "koku" i. e. about 60 per cent. of the total output of the Prefecture. The Co. has now a capital of 100 million yen and produces 500,000 "koku" a year. The commodity is recently exported to European countries and China to the extent of about 18,000 koku (¥1 million) annually. The number of factories is about 12,600 throughout the country.

Statistics

Year ended March	Sake (1,000 koku)	Beer (1,000 koku)	Soy (1,000 koku)
1923	6,195	806	3,661
1924	6,066	875	3,519
1925	5,795	858	2,084
1926	5,439	768	2,826

FLOUR

The productive capacity of the 33 machine mills is something like 44,600 barrels in 24 hours as in Jan. 1928. The two largest are Nippon Flour, 17,800 bbls. a day and Nisshin Flour, 20,100. In 1927 Japanese flour was shipped abroad to the extent of 1,251,687 piculs as against imports amounting to 132,572 piculs; and in 1928 (up to June) the figures were 872,743,000 and 103,304 cattles respectively.

The supply of wheat at home is not enough to meet the demand of the mills, the annual output in Japan averaging 5.6 million "koku" (6 "koku"=1 ton) of which something like 2 mil. are used for soy brewing and other purposes. The deficit must be made good with the foreign produce, from Manchuria, Australia and America. (Vice Food Problem, 1928 Edition Supplement).

PAPER

From olden times Japan has been manufacturing tough paper from fibres of certain shrubs, "mitsumata," "koso," etc. The manufacture of the European style paper in this country dates from 1874 when a modest mill was established in Tokyo. At present there are several large mills of which the Oji, Fuji, Mitsubishi, Karafuto Kogyo, etc. are principal cos. Besides supplying the domestic demand a small quantity of the product is exported to China, Straits Settlements, U.S.A. and a few other countries. Certain kinds and superior quality paper are imported from Sweden, Germany, U.S.A., etc. The plants having been newly installed or enlarged in scope for manufacturing card-boards, printing and packing papers, remarkable increase in the output has been realized. The total amount of paper produced in 1926 and 1927 by the mills forming the Paper League which supplies over 90% of the total output, was 1,073,048,788 and 1,151,515 lbs. respectively, the detailed figures being as follows. (In unit of 1,000):—

Year	Printing	Printing	Newsprint	Torlonoko	Wrappers	Sandites	Others
1926	151,828	123,650	501,893	75,765	40,058	109,600	1,074,648
1927	158,094	128,774	488,556	79,314	55,848	147,632	1,131,515

It is noteworthy that despite the extreme depression in recent years the demand for foreign-style paper continues to increase yearly, the rate of increase keeping pace with the growth of production. The situation of demand and supply in recent years is as follows:

	Production	Demand
1921	534,450,000	551,310,000
1922	629,342,000	627,568,000
1923	729,508,000	709,844,000
1924	817,383,000	804,807,000
1925	931,772,000	898,602,000
1926	1,074,647,000	1,039,408,000
1927	1,151,515,000	1,131,568,000

The value of home production, import, export and consumption for the 4 years ending 1926 is as follows (¥1,000):

	Production	Import	Export	Consumption
1923	139,452	17,051	15,167	141,336
1924	150,439	27,372	8,614	169,197
1925	164,695	17,156	20,236	161,615
1926	179,629	20,415	18,998	181,046

Japanese Papers.—As a rule native-style papers are dependent on household industry, a factory on a modern scale being an exception. Tosa, Kochi, Gifu, and Shizuoka are the three important centres of production. The output for the whole country is shown below (in 1,000):

Year	Harashi		Mino		Renshi		Total incl others (value) Yen
	Prod. (shime)	Value (Yen)	Prod. (shime)	Value (Yen)	Prod. (shime)	Value (Yen)	
1924	4,329	6,767	553	2,490	—	573	53,437
1925	4,335	6,494	540	2,338	—	704	53,010
1926	—	6,814	269	1,931	—	723	—

Financial Position.—The figures for the Oji (nominal capital ¥65,918,650) and the Fuji (n. cap. ¥77,700,000) will serve to show the position of the industry:—

	Oji			
	1st half 1926	2nd half 1 26	1st half 1927	2nd half 1-27
Paid-up capital (¥1,000)	41,886	47,097	48,683	48,683
Profit (")	5,634	6,189	6,302	6,298
Ratio of profit (%)	2.69	2.63	2.58	2.58
Dividend (%)	1.50	1.50	1.50	1.50

	Fuji			
	1st half 1926	2nd half 1926	1st half 1927	2nd half 1927
Paid-up capital (¥1,000)	49,537	49,537	49,537	54,231
Profit (")	5,053	5,062	5,288	4,951
Ratio of profit (%)	2.04	2.04	2.13	1.82
Dividend (%)	1.50	1.50	1.50	1.50

Pulp.—The output of pulp, which in recent years has increased to over 633,000 tons a year, as in 1927, is sufficient to meet the demand at home, though with a decreased supply of wood in more convenient districts the manufacturers have been obliged to set up mills further and further north, the leading producers being Karafuto Kogyo, Fuji and Oji Paper Mfg. Cos. The three companies have factories at Karafuto as also in Hokkaido and Chosen.

Fancy Work.—Paper fancy work is the latest innovation and dates from about 1911 when the Nippon Shiki Seizojo (the present Nippon Shigyo Co.) in Tokyo started the work. Exports of card boxes, packing paper, label, napkins and other paper wares amounted to ¥3,313,964 in 1927, besides fans worth ¥510,404 mostly going to the U. S. A. and Canada.

Hats and Clothing.—The gloomy prospect of the native paper industry has begun to brighten with the discovery of a new method of utilizing the mulberry-bark paper for preparing threads of strings used for weaving hats and clothing. The "Toyo Panama hat" has gradually gained in popularity on the foreign market, its production once reaching between ¥4 and 5 millions, though declining later to about one half.

CELLULOID

With the resumption of work by the European manufacturers after the restoration of peace the output that reached 3,822,000 "kin" in 1920 relapsed to 2,438,000 "kin" and the export also declined, till its amount has fallen to insignificance. In August 1919, leading manufacturers combined to form the Dai-Nippon Celluloid Co. with a capital of ¥12,500,000 to tide over the difficulty. Japan commanding the supply of camphor is at least advantageously placed in this particular branch of industry.

Year	Production (Yen 1,000)	Export of manufactures (Yen 1,000)	
		Toys	Miscellaneous
1923	12,823	1,670	355
1924	15,702	2,718	585
1925	17,092	4,265	510
1926	15,809	4,546	796
1927	—	4,077	840

LEATHER

Comparative inactivity of stock-farming in Japan makes it impossible for the country to be self-dependent in the supply of hides and leathers, especially in view of the growing demand for leather goods. Imports from China and Australia, etc. make up the deficit, exclusive of that from Korea. The increase of tariff in 1911 from ¥5.60 per 100 "kin" to ¥15.20 and the removal of 5% ad valorem duty from ox-hides have given a great stimulus to the leather industry. However, in view of the absence of raw materials at home and the imperfect technical knowledge, especially as regards the thin article, the prospect of the industry is rather gloomy. The art has not yet advanced beyond producing sole and box leather.

Year	Of cows and calves Yen 1,000	Of horses Yen 1,000	Others Yen 1,000	Total Yen 1,000	Export Yen 1,000
1922	14,890	1,079	3,095	19,064	896
1923	13,860	1,030	2,284	17,174	605
1924	14,690	1,051	1,256	16,997	659
1925	17,266	1,370	2,342	20,978	1,300
1926	27,457	1,080	6,832	35,320	859

ISINGLASS

Japanese isinglass ("kanten") has been exported to Europe and America of late years as a product peculiar to Japan, the article being used there chiefly for making jam. The production is as follows:—

Year ended March	Quantity 1,000 kan	Value Yen 1,000	Year ended March	Quantity 1,000 kan	Value Yen 1,000
1924	385	5,507	1926	365	4,919
1925	351	5,143	1927	349	3,814

RUBBER

The manufacture of rubber goods is one of the new industries established quite recently as a result of the protective tariff. The first rubber works was built in 1886. There are now over 50 firms that turn out tyres, tubes, pipes, etc., their combined output in 1925 and 1926 being ¥55,630,482 and ¥58,600,248 respectively. The Tokyo, Yokohama and Nippon Rubber Cos., are leading establishments exclusive of those run by foreigners.

Japanese Rubber Plantation in Malaysia.—Japanese rubber plantation in the Malay Peninsula has made a marked progress. At one time the vested interest reached about ¥50,000,000 for 248 plantations covering over 200,000 acres, with output estimated at 4 million pounds or more. Sale to British planters lately is said to have much curtailed the scope of the Japanese rubber enterprises. In 1926 there existed 18 concerns with plantations covering the combined area of about 20,000 acres, and an investment of about 70 millions, the leading establishments being the Nan-a, Nettai Sangyo and Sumatra Cos. Besides several wealthy capitalists as Mitsui, Mitsubishi, Furukawa, Fujita, Morimura, etc. are interested in this business.

LACQUER AND WARES

For the decreased export recently were chiefly responsible the use of inferior Chinese lacquer and the imperfect preparation of the body, making the ware unfit for drier climates as in America and Europe. The demand for lacquer, however, has largely increased lately at home and abroad. At present about two-thirds of the juice consumed come from China, but being tapped from wild trees, and crudely refined, it is much inferior to the home article. Bowls of all sizes and shapes for serving food, trays for holding them, caskets, boxes, etc. are some of the utensils and furniture which are made by our lacquermen. As

centres of this industry there are Wajima and Yamashiro-Yamanaka in Ishikawa, both reputed for producing very durable wares; Takamatsu in Sanuki and Murakami in Echigo for vessels designed with "piled up" lacquers; the three north-eastern districts of Aizu, Nambu and Tsugaru for kitchen and decorative wares which are both antique in design and make. Shizuoka contributes 60% of the total exports at present but the fact Shizuoka makers have too much directed their efforts to producing cheap and showy wares catering to foreign customers considerably lowered the tone and quality of their production. Other places to be mentioned in this connection are Yokohama, Nagoya, Kuroe (Wakayama-ken), Takaoka (Toyama-ken), etc. The juice has wider application than it had formerly, being used, for instance, for varnishing railway and other cars, coating the bottom of warships, etc. Production of the juice and lacquered wares is as follows:—

Year	Juice (Kas)	Wares (Yen 1,000)	Year	Juice (Yen 1,000)	Wares (Yen 1,000)
1923	116,484	27,755	1925	2,437,000	30,939
1924	128,243	30,097	1926	1,849,000	30,414

OILS, FATS AND WAXES

With abundant supply of raw materials, fish oil at home and bean oil from Manchuria, Japan is well prepared for the progress of the hardened oil industry. 80% of the total production once found a foreign market to be used for soap making in place of beef tallow. The dwindled demand for this material with gradual recovery of the tallow industry abroad operated unfavorably to the hardened oil market of Japan. Two or three leading concerns in this line have been dissolved or suspended operations. Fish and whale oils, vegetable oils and waxes have also greatly suffered of late both in output and export. Their recent movement may be seen from the following table compiled from the official reports:—

Fish Oil and Whale Oil

Year	Sardine oil		Herring oil		Whale oil		Others	Total
	1,000 kan	Yen 1,000	kan	Yen 1,000	1,000 kan	Yen 1,000	Yen 1,000	Yen 1,000
1924	3,216	1,821	1,069	548	590	480	740	3,534
1925	2,941	1,567	1,531	888	947	640	897	3,993
1926	3,257	1,389	1,229	675	871	432	945	3,423

Vegetable Oils (in ¥1,000)

Year	Rape seed	Sesame	Yemula	Cotton seed	Bean	Peanut	Total incl others
1924	13,166	2,189	1,900	1,420	10,045	194	40,592
1925	13,511	2,760	2,146	2,041	13,923	137	44,079
1926	13,474	2,182	1,775	2,666	13,387	108	44,079

Vegetable Wax

Year	Production	
	Crude	Refined
1924	3,616	3,676
1925	2,504	2,553
1926	1,195	—

Oil and Fats in Trade Returns (in ¥1,000)

Year	Exports					Imports	
	Bean	Rape	Whale	Gamphor	Volatile	Bean	Beef tallow
1925	2,878	1,547	4,127	394	2,848	5	5,942
1926	3,045	6,038	4,486	821	3,012	19	6,324
1927	1,704	5,863	2,314	672	2,448	14	5,025

SOAP

The leading soap factories are Marumiya and Kwa-o Soap Works in Tokyo and the Harumoto, Nitto, Tonoi, Hagiwara Soap Works, etc. in Osaka. The recent data are as follows (in ¥1,000):—

Year	Toilet	Industrial	Laundry & others
1924	17,982	3,093	7,677
1925	20,526	1,964	7,628
1926	21,124	2,114	9,967

Soap generally goes to China, Manchuria and South Seas, the latter being a promising market for our production.

Exports

Year	Toilet		Laundry	
	(1,000 doz.)	(Yen 1,000)	(1,000 kin)	(Yen 1,000)
1924	1,794	1,907	5,506	1,758
1925	1,678	1,954	1,980	623
1926	1,464	1,653	482	145
1927	1,410	1,544	234	68

PEPPERMINT

Peppermint has its centre of production in Kanagawa-ken supplying 46%, followed by Hyogo-ken and Hokkaido. The production suddenly decreased in 1918 due to the encroachment of higher price of rice and other crops on the peppermint area, but since then the former level has been recovered. The amount of peppermint produced and exported is as follows, in ¥1,000:—

Year	Crude	Menthol Crystal	Oil	Export Peppermint oil
1924	8,410	7,440	1,977	2,421
1925	12,809	6,485	3,106	5,309
1926	—	13,127	8,896	4,791

V. THE BUILDING INDUSTRY

According to the investigation of a certain banking institution, there were 106,628 newly completed buildings during 1926 in the six premier cities, viz. Tokyo, Osaka, Yokohama, Kyoto, Kobe and Nagoya, and their suburbs, where the Law for Buildings in the Urban Districts is in force. The figure excludes temporary buildings erected in the burnt zones of Tokyo and

Yokohama. The amount expended approximated ¥450 millions against ¥501,386,000 for the previous year.

The combined floor space of the new buildings completed during that year in the six premier cities was 3,305,810 tsubo (tsubo=about 4 sq. yds.), subdivided as follows:—residences, 1,471,765 tsubo; business offices and shops, 1,133,244 tsubo; industrial plants 596,183 tsubo, and other structures 104,630 tsubo.

Cost per tsubo is tabulated below:—

	Wooden frame	Stone	Steel frame
Residences	¥135	¥270	¥400-450
Offices	160-180	230-270	320
Ind. plants	100	180	160
Others	160-180	230-270	320

The total invested in new construction is estimated as follows for the six premier cities and suburbs:—

Residences	¥186,180,000
Offices	188,869,000
Ind. plants	57,436,000
Others	16,609,000
	<hr/>
	449,104,000

The relative amount by the cities on new buildings is shown below:—

Cost of Buildings by Cities (In ¥1,000)

	Tokyo	Kyoto	Osaka
Residences	57,176	24,074	52,481
Offices	60,004	15,254	76,574
Plants	19,042	2,005	28,124
Others	2,774	2,045	4,343
Total	138,999	43,381	161,523

	Kobe	Yokohama	Nagoya
Residences	18,315	8,820	25,314
Offices	7,540	13,173	16,324
Plants	3,211	1,705	3,348
Others	2,883	935	3,629
Total	31,951	24,635	48,615

Compared with the returns for the previous year when 109,585 houses with the combined floor space of 3,297,056 tsubo were newly completed in the six cities the amount invested for the purpose was less by about 10 per cent. as is shown in the following table (In ¥1,000):—

	Tokyo	Kyoto	Osaka	Kobe	Yokohama	Nagoya	Total
1925	174,728	43,653	168,740	38,860	28,754	46,574	501,386
1926	138,999	43,381	161,523	31,951	24,635	48,615	499,104

It is significant to note that the cost of construction recently is downward for all kinds of buildings, the rate in 1926 being about 10 per cent. lower than that in the previous year. In all the foregoing figures extensions were estimated to cost as much as the new building, remodelling 90% and thorough overhauling 60% of the new.

VI. MISCELLANEOUS INDUSTRIES

CANNED ARTICLES

Japan's canning industry, especially that of fish, is now an established line of international fame. Tinned salmon to England and tinned crabs to America are important items of export. The centre of the packing industry is Hiroshima-ken and Hokkaido. The salmon come from Russian Siberia and tinned crabs from Karafuto, Hokkaido and the Kuriles, and the bulk is handled by the Nichiro Gogyo Co.

Production (¥1,000)

Year	Beef	Fish and shellfish	Fruits	Vegetables	Total incl. others
1924	3,951	9,258	1,226	4,523	23,188
1925	2,826	7,443	1,208	4,324	20,734
1926	2,630	9,409	1,157	3,361	20,905

Condensed Milk

An import duty of ¥8.30—13.40 per 100 "kin" is imposed upon foreign manufactures while the home product is exempted from income tax for the first three years, besides receiving rebate on the sugar consumption tax paid. Foreign competition and over-production have retarded the development, as may be surmised from the following table (in 1,000):—

Year	Production		Imports	
	kin	Yen	kin	Yen
1923	14,083	6,025	9,543	6,000
1924	16,219	6,869	9,557	5,750
1925	15,631	6,160	7,072	3,971
1926	17,720	6,325	7,231	3,643

Exports amounted to 17,783 dozens (¥89,363) in 1926 and 33,267 dozens (¥128,845) in 1927.

TOYS

Toy manufacture in Japan is passing from household to factory industry. Its centres are Tokyo, Kyoto, Osaka and Aichi. Each has some specialty; Tokyo produces mainly celluloid, tin and rubber toys with some quantities of wooden and cloth toys. Osaka is noted chiefly for cloth toys, paper novelties and celluloid, Kyoto for its exquisite porcelain toys and earthenware, etc. In the making of dolls Kyoto stands first in art, Tokyo and Osaka coming next. In wooden toys, inlaid wood and other artistic objects Hakone, the famous summer resort near Tokyo, has long been noted for excellent workmanship, but these articles now come from various other districts with increased demand both at home and abroad.

Exports chiefly consist of porcelain and celluloid toys as well as cotton and paper novelties for Christmas and Easter season. The demand for leather and inlaid wood works has been on an

increase. The bulk of tin toys goes to England, Canada, China, India and Siberia. There are also bamboo wares shipped abroad. The statistics for the recent years are as follows:—

Production (in ¥1,000)

Year	Celluloid	Metallic	Rubber	Wood	Paper	Total incl. others
1924	1,208	507	3,384	209	64	8,198
1925	988	778	3,438	246	332	7,470
1926	1,972	683	2,700	259	—	5,810

Exports (in ¥1,000)

Year	Celluloid	Rubber	Wood	Others	Total
1925	4,265	1,789	749	4,255	11,058
1926	4,546	1,478	531	4,306	10,860
1927	4,077	1,533	579	4,331	10,520

WATCHES AND CLOCKS

Manufacturing of clocks, both standing and hanging, dates back to about 1882, and in 1920 clock works numbered 34, mostly in Aichi Prefecture though on insignificant scale. Watch making as at present carried on is represented by the Seikosha run by Messrs. K. Hattori & Co. in Tokyo, the product for 1926 being 399,566 watches and 1,421,776 clocks.

STRAW, CHIP AND HEMP BRAIDS

The use of straw braids for the manufacture of toys and other articles has been known from ancient times in the neighborhood of Tokyo, but it was in the early days of Meiji that, at the suggestion of some foreigners, the hat-manufacturing business with straw began to be undertaken at Omori, near Tokyo. Soon the industry spread to various parts of the country, especially to Okayama and Kagawa, which are now the principal centres of the industry, the two places supplying the bulk of the goods.

The manufacture of chip braid was first introduced into Japan in Omori and other places near Tokyo which had lost the business of straw braid. The industry has lately removed to Yamaguchi, Okayama, Kagawa and other prefectures. The wood of the "populus temula" is best suited for this kind of braid.

Hemp braid industry was first started in Yokohama after the Russo-Japanese war, and in point of value hemp braid now occupies a good position on the list of exports.

Production (in ¥1,000)

Year	Straw	Chip	Straw & Chip mixed	Hemp	Total
1924	3,967	196	48	4,404	8,676
1925	4,449	228	16	7,711	12,405
1926	2,785	190	26	5,878	8,879

Exports (in ¥1,000)

Year	Straw	Chip	Mixed	Total incl. others
1924	3,570	13	5,588	9,171
1925	4,459	21	7,815	12,297
1926	3,453	26	6,852	10,330
1927	3,020	44	5,384	8,459

HOSIERY

The principal centre of this industry is Osaka where over ¥50 millions worth of goods were turned out during the war boom, or about 50 per cent. of the total in Japan. There are three large companies in Osaka, i.e. Japan Hosiery, Marumatsu & Co. and the Japan Spinning & Weaving Co. Cotton goods occupied 80% of the total value. Japanese hosiery goods find good market in China, India, South Seas and Africa.

Production (¥1,000)

Year	Shirts & drawers	Stockings and socks	Gloves	Total incl. others
1924	21,190	6,531	1,605	40,816
1925	22,990	7,054	1,396	38,267
1926	32,261	11,152	3,517	55,054

Staple Exports (¥1,000)

Year	Shirts & drawers	Socks & stockings	Gloves	Total incl. others
1925	27,948	2,486	446	30,979
1926	23,076	2,324	505	25,905
1927	25,093	2,950	507	28,550

MATS

It was after 1886 when a loom for mat-weaving with patterns shown equally on both sides was invented that a real progress began in export business. One grave drawback in this industry is the tedious labor required in preparing the warp which consists of rushes interlaced with yarns.

The weaving of fancy matting is generally a side line of farmers. Even in Okayama Prefecture that boasts the greater half of the total output, there are only a few factories doing business on any large scale. For coloring the rushes natural dyes alone were formerly used, but now artificial dyes are common and the printing of design began to prevail from about 1921. Nearly two-thirds of the output of printed mats come from Okayama, Hiroshima, and Fukuoka.

The Government Mat Conditioning House exists in Kobe to enforce inspection on mats intended for export, the inspection being carried out on weight, texture, raw material used, edging, dyeing, etc.

BRUSHES

Hair-brushes, nail-brushes and tooth-brushes are produced principally in Osaka and vicinity. The total output in 1926 was ¥5,742,964. Export to U. S. A. and Great Britain has declined much due to the slump and encroachment of German and French goods and also to the embargo on Japanese shaving brushes in England, Australia and India. Raw materials with exception of some kind of woods used for inferior sockets, come from abroad, bristles from China and Europe, bones for sockets from America and Australia, and hard wood from Siam. For tooth-brushes, foreign raw materials alone are used.

BUTTONS

The output of buttons was ¥3,654,675 in 1925, of which shell buttons amounted to ¥2,731,193. Buttons exported during 1924 reached ¥8,959,158, then dropped to ¥8,664,585 in 1925, ¥8,511,000 in 1926, to increase to ¥9,851,565 in 1927, the bulk being represented by shell buttons. England, India, and the U. S. A. are principal customers. The manufacturing centre is Osaka which turns out about 50 per cent.

MINOR MANUFACTURES

Enamelled Hard Wares

Year	Production	Year	Export
1923	¥ 7,249,572	1924	¥ 5,621,669
1924	8,657,645	1925	6,908,056
1925	11,131,553	1926	5,970,328
1926	9,028,755	1927	5,933,026

Wood Manufactures

(Including cabinet works, boxes, barrels, etc.)

Year	Production	Year	Export
1923	¥165,958,600	1924	¥ 3,702,204
1924	171,160,966	1925	4,354,499
1925	179,873,132	1926	3,769,486
1926	189,297,609	1927	3,292,639

(Also vide Chap. on Forestry)

Bamboo Wares

Year	Production	Year	Export
1923	¥ 13,484,987	1924	¥ 1,543,845
1924	14,600,644	1925	1,835,215
1925	14,557,331	1926	1,754,461
1926	14,009,112	1927	1,486,304

The bulk of the exports is baskets, trunks and bags.

Fans and Folding Fans

Year	Production	Year	Export
1923	¥ 4,744,984	1924	¥746,174
1924	1,986,529	1925	753,317
1925	5,176,238	1926	635,204
1926	938,000	1927	510,404

Leather Goods

(including boots, bags, portmanteaus, etc.)

Year	Production	Year	Export
1923	¥23,664,119	1924	¥482,676
1924	25,807,053	1925	801,780
1925	28,568,976	1926	598,561
1926	29,844,533	1927	603,739

Toilet Articles

Year	Production	Year	Export
1923	¥13,496,400	1924	¥1,927,049
1924	23,426,900	1925	2,240,561
1925	27,094,116	1926	2,095,857
1926	23,922,840	1927	2,950,995

Exports include toilet cream, perfumed water, hair oil, tooth and toilet powders.

Wicker Works

Year	Production	Year	Export
1923	¥4,835,737	1924	¥170,324
1924	4,507,422	1925	165,400
1925	4,496,440	1926	218,995
1926	5,200,138	1927	255,736

Insulated Electric Wire

Year	Production	Year	Export	
			Picul	Yen
1923	¥56,390,153	1924	20,274	1,372,821
1924	54,691,792	1925	25,637	1,774,464
1925	49,628,679	1926	27,583	1,863,704
1926	78,025,372	1927	32,299	1,942,189

CHAPTER XXXIV

TRADE

RECENT TRADE SITUATION

Heavy depression continued to hung over both tradal and industrial world from 1927 to the upper half of 1928. As shown in the business promotion returns given later, figures for new promotion and expansion in the first half of 1928 fell below those for the corresponding period of 1927. One thing that stands out as peculiar in this connection is the growth of debenture and loan figures which in 1927 surpassed the preceding year by ¥65 millions and in the upper half of 1928 by over ¥45 millions compared with the corresponding half year of 1927. This strange phenomenon was evidently a reflex of the special loans made by the Bank of Japan in 1927 on the occasion of the memorable banking crisis that year when to rescue the Bank of Taiwan, the Fifteenth and other banks threatened with ruin the Central Bank, under special law, accommodated no less than ¥879 millions, thereby swelling the Bank's balance of loans to something like ¥150 millions, as described in the Chapter on Banking in this and previous editions. The result was the bankers experienced plethora of fund and were at a loss how to turn it to best advantage. Warned by the painful experiences of the post-war boom troubles they jealously guarded the door of credit to all applications for loans from business men, with the result that these financiers were obliged to invest their superfluous fund in well-secured debentures and loans coming from first class companies and also in Government bonds and similar gilt-edged securities. The market price of bonds and debentures naturally advanced, thereby causing the fall of yield, as may be judged from the following returns compiled by the Industrial Bank of Japan and the Hypothec Bank of Japan:—

Yield of Gov. Bonds, Debentures and Similar Securities

	Gov. bonds	Nokyo bonds	Debentures	Average yield
Aug. 1, 1927.....	5.620%	7.426	7.314	6.751
Dec. 1, ".....	5.367	7.168	7.189	6.403
Apr. 2, 1928.....	5.209	6.966	6.894	6.304
Aug. 1, ".....	5.005	6.725	6.651	6.010

Thus during the last year the average yield dropped about .8%, while compared with the average yield of 8.1% three years before the rate ruling at the beginning of 1928 was a drop of roughly 2%. To the debtor companies and others suffering from heavy interest bills this fall of interest was really an unexpected boon, and of course they fully utilized the occasion for the purpose of replacing the higher debts with cheaper money. In one sense, therefore, the banking crisis in 1927 had the beneficial effect of stabilizing the basis of no small number of business

concerns. This unusual activity of debenture issue may be gathered from the following figures in unit of 1,000 showing the comparative returns for the last three half-years:—

	1st half '26	1st half '27	1st half '28
National loans	594,763	207,000	253,500
Local loans	168,813	82,854	82,798
Banking debentures ...	372,999	121,196	86,385
Company debentures ...	734,507	270,000	280,850
Total	1,871,082	681,050	703,478

Average Quotation, Rate of Dividend and Yield of First Class Stocks

	Quotation.	Dividend	Yield
Sept. 1927	¥ 90.53	10.98%	6.86%
Feb. 1928	97.79	10.71	6.18
July ..	101.35	10.73	5.96

The rise of quotations was really due to excess of idle money and by no means to normal activity of business, as may be easily seen from fall of dividend and yield. Another factor confirming that conclusion is the fact that the turn-over of long-term transactions on the Tokyo Stock Exchange that was returned at 22,962,000 shares for the upper half of 1927 fell to only 13,755,000 for that of this year.

Outstanding Features in Trade and Industrial World

Chamber of Commerce and Industry.—In accordance with the Chamber of Commerce and Industry Law that came into force in January '28 the Japan Chamber of Com. & Ind. was created in Tokyo in April the same year, the chair occupied by the former chairman of the Tokyo Chamber of Commerce and the two deputy chairmen by the former chairmen of Osaka and Yokohama.

Restricted Production.—As an expediency for safeguarding their interest, most of the leading industries have even enlarged the scope of restriction. The cotton spinners increased the rate of contraction by 5% and made it to 23% altogether, coal-miners decided to raise the rate from 5 to 10%, superphosphate manufacturers from 16 to 20%, paper mills to reduce 10%, cement 32%, milling roughly 40%, and so on.

Electric Lighting Tariff Agitation.—The tariff reduction agitation that was started in July this year in Toyama provoked by the repeated stoppage of connection led to general boycott of the Electric Co. by the consumers. It was settled after about 40 days of wrangling between the two opposing parties through the friendly intervention of the local Governor, the Co. agreeing to pay the compensation of roughly ¥400,000. As in the case of the now historic Rice Riot identified with Toyama the agitation spread throughout the country from Okinawa to Karafuto, and many electric companies have been obliged to reduce the tariff on their own accord.

New Insurance Activity.—Noticeable phenomenon in the insurance field of Japan is the starting of various secondary

insurances by several of the leading fire insurance cos., these being in the shape of cover against storm and flood damage, automobile, fidelity, riot, forest, etc. Stock insurance is projected by the Government who is prepared to undertake reinsurance. The creation in July last of the Dai Nippon Automobile Ins. Co. specially devoted to this line, instead of as side business, is a sign of the times.

American Corn Starch Enterprise.—Stimulated by the advance of duty on corn starch the Corn Production Refining Co. of New York is said to have decided to start a corn starch co. in Japan with the capital of ¥8 to 10 millions, the object being to produce 700,000 piculs of starch. The supply of corn being insufficient in Japan the shortage is to be ordered from Manchuria, Java, etc.

Laboratories.—Following the example set by Osaka the Tokyo Industrial Institute has established an open laboratory where outsiders desirous of conducting their own special researches may get a loan of rooms at a low rent, the laboratory containing 67 rooms, large or small, with the rent of about ¥60 a month.

New Record at Yawata Iron Foundry.—The Foundry's ambition of turning out 1 million tons of steel a year was at last realized in 1927 when the output is reported to have exceeded that level by 50,000 or 80,000 tons.

New Investment Capacity, estimated at ¥2,000 Millions

Data for estimating the yearly investment in economic enterprises are still defective in Japan, writes the "Oriental Economist" in "The Company Review" published in Nov. 1926, but the following figures quoted from one of its articles may be serviceable as an approximate estimate on this question. In the table the figures showing loans, debentures and reserves are addition over the preceding year, while those for stocks are payment for the year. (In million yen):

Year	Internal loans	Local loans	Total	Payment of stocks & net debenture increase	Additional reserves	Grand total
1921	473	86	559	786	296	1,642
1922	170	90	265	655	30	950
1923	203	122	325	627	400	1,353
1924	155	134	289	751	400	1,441
1925	243	68	311	850	400	1,562

N.B.—The "Reserves" covers joint stock and limited partnership cos. and the additions in 1924 and '25 are presumed to be equal to that in '23. The minor concerns of partnership organization had total paid-up capital of ¥957,000,000 at end of 1920, to advance to ¥1,355 millions three years later, an average increase of ¥130 millions. Adding this sum to the grand total mentioned in the table the investment for 1924 and '25 comes to roughly ¥157 and 170 millions respectively. There are besides investments by individual traders and so forth. Altogether, therefore, Japan's yearly investment may not fall below ¥2,000 millions, or at the rate of ¥300 per capita of annual increase of population which is about 700,000. It is interesting to compare this to the corresponding figure for England, generally put at ¥10,000 per capita.

BUSINESS PROMOTION IN 1928 (1st half)

As investigated by the Bank of Japan new investment or expansion by companies in 1928 (1st half) is as follows for the entire field of business enterprises (in ¥1,000):—

	New Promotion		Expansion	
	No. of Cos.	Inc'd Cap.	No. of Cos.	Inc'd Cap.
Total investment 1928 (Jan.-June)	339	257,406	91	167,880
Comparison with 1927 (1st half) †81		‡77,062	*14	‡65,510

N.B.—(*) increase, (†) decrease.

Deflation in Recent Years

The following statistics compiled by the Japan Industrial Bank will serve to show the situation of deflation tendency in business enterprises during the eight years from 1920 when our economic circles entered the period of the reactionary depression that followed the period of post-war boom to 1927; the data giving the amount of capital invested, loans raised, reduced capitalization and capital of dissolved business, for joint stock companies only (figures in unit of ¥1,000):—

Year	New promotion	Expansion	Loans	Capital reduced	Dissolved business
1920	3,444,381	1,687,961	166,430	9,257	251,939
1921	1,691,217	1,792,455	567,393	130,232	662,112
1922	1,195,296	846,760	431,185	427,265	778,941
1923	574,331	375,246	325,689	136,138	353,683
1924	796,802	879,756	954,700	497,908	1,006,248
1925	624,615	540,191	762,138	269,632	450,650
1926	726,288	475,265	614,077	187,716	514,737
1927	905,754	820,495	788,447	185,391	554,398

GENERAL STATISTICS ON ECONOMIC CORPORATIONS

Companies Classified by Organization

(End of 1926)

Cos. classified by amount of paid up capital	Joint stock companies		Limited partnerships		Unlimited partnerships		Total	
	No.	Cap.	No.	Cap. (Capital in Yen 1,000)	No.	Cap.	No.	Cap.
Under Yen 50,000.....	4,031	58,145	10,736	104,186	3,713	50,514	18,496	236,422
" Yen 100,000.....	2,692	96,546	1,087	62,688	805	45,941	4,587	260,586
" Yen 500,000.....	6,341	661,160	841	123,475	792	132,237	7,984	1,363,813
" Yen 1,000,000.....	1,900	603,100	90	51,580	82	44,650	2,137	1,140,400
" Yen 5,000,000.....	2,046	2,097,787	61	98,806	87	141,825	2,196	3,560,511
Over Yen 5,000,000.....	634	6,708,586	9	325,000	23	655,550	666	11,062,483

Number and capital of economic corporations as classified by nature of enterprises are returned by the Department of Commerce and Industry as follows at the end of the year, amount of capital being in ¥1,000:—

		1926	1925	1924
Agriculture	No.	714	724	709
	Authorized cap. ...	187,745	191,352	172,576
Fishery....	No.	220	196	236
	Authorized cap. ...	83,548	72,455	82,269
Mining....	No.	349	325	366
	Authorized cap.	1,086,931	1,036,396	1,064,051
Trade....	No.	18,318	17,302	16,523
	Authorized cap. ...	7,697,552	7,309,347	7,229,806
Trans- portation	No.	2,756	2,565	2,482
	Authorized cap. ...	1,851,776	1,680,696	1,537,506
Industries.	No.	13,711	13,233	13,251
	Authorized cap. ...	6,725,974	6,173,953	6,054,629
Total incl. others	No.	36,068	34,345	33,567
	Authorized cap.	17,633,526	16,464,200	16,140,836

Business Results in Recent Years

The only available data on this head are supplied by the "Oriental Economist" (Tokyo), which, however, modestly disclaims any pretension to strict accuracy chiefly on account of many of the Cos. showing reluctance to supply information, so that the following covers only about 150, viz. about 1/71 of the economic corporations existing in Japan. In the following table the figures are for the 2nd half of each year, money being in ¥1,000.

	P. u. cap. Yen 1,000	Reserves Yen 1,000	Profit Yen 1,000	Ratio to cap. 10 per cent.
Spinning mills.				
1925	207,833	154,733	38,769	3.73
1926	212,520	159,536	32,804	3.09
1927	217,520	166,055	39,129	3.59
Woolen textiles.				
1925	41,671	13,460	3,173	1.53
1926	43,500	14,915	3,180	1.46
1927	52,500	14,709	5,052	1.92
Paper mills.				
1924	101,407	17,383	3,914	1.96
1925	114,974	25,464	13,066	2.27
1926	137,551	31,769	14,250	2.07
1927	153,626	35,201	14,342	1.86
Flour mills.				
1924	14,710	3,007	1,875	2.55
1925	17,032	6,100	1,868	2.19
1926	19,140	6,350	8,523	—
1927	19,013	3,350	539	0.56
Mining.				
1924	107,500	37,292	2,697	0.50
1925	227,766	65,170	11,920	1.05
1926	226,725	65,994	12,487	1.10
1927	226,725	66,154	14,044	1.23
Gas.				
1924	67,581	6,416	4,390	1.28
1925	65,795	6,246	4,798	1.46
1926	76,796	6,579	5,888	1.53
1927	87,275	7,292	6,981	1.59

	P. n. cap. Yen 1,000	Reserves Yen 1,000	Profit Yen 1,000	Ratio to cap. 10 per cent.
Beer breweries.				
1924	44,871	24,192	9,959	4.44
1925	47,351	25,570	9,415	3.98
1926	51,841	29,076	8,396	3.24
1927	47,800	31,342	8,000	3.34
Electric power and light.				
1924	698,053	41,320	40,816	1.17
1925	649,685	29,737	40,078	1.23
1926	797,830	35,143	51,107	1.28
1927	864,152	42,018	51,712	1.17
Shipbuilding & mechanical engineering.				
1924	75,160	43,921	3,940	1.00
1925	105,192	48,645	5,274	1.00
1926	115,730	48,824	5,691	0.98
1927	54,615	14,418	1,023	0.37
Exchanges.				
1924	81,875	8,409	4,274	1.02
1925	75,000	7,411	5,113	1.36
1926	81,750	8,185	6,128	1.50
1927	81,750	9,260	4,374	1.07
Sugar.				
1924	144,617	53,918	18,805	2.60
1925	144,617	52,260	13,369	1.85
1926	150,379	55,239	10,812	1.44
1927	154,001	53,214	11,060	1.43

CHAMBERS OF COMMERCE

Though Japan had before 1868 commercial organization that served as Chambers of Commerce, it was not till 1890 that the regular regulations were enacted. At present, with the exception of six prefectures of Miyazaki, Oita, and others, one or more Chambers of Commerce exist in forty other prefectures and Hokkaido. By amendment of the Chambers of Commerce Law passed in the 1908-9 session of the Diet the Chamber of Commerce is forbidden compulsorily to collect subscription from the members. The data for the recent years are as follows:—

Year	Number	Members	Annual expenses
1923	65	1,937	2,434,648
1924	70	2,065	2,653,973
1925	76	2,445	2,280,773
1926	76	2,392	2,385,466
1927	77	2,507	2,832,000

As mentioned elsewhere the Chambers of Commerce and Industry Law came into operation in April 1928.

EXCHANGES

Exchanges in Japan are of three kinds, i.e., stock, rice and merchandise. There are eight exchanges devoted to dealing in securities, either exclusively or in combination with other com-

modities. The exchanges are all of limited liability system though those modelled on the Western plan of association are recognized by law. They are therefore more on the continental plan than those in England or America and are subject to strict control of the supervising authorities who are authorized to interfere at their own discretion when they judge that the exchange abuses its privilege and acts in an irregular way. From the nature of their organization exchanges have to stand security, within the limit of their authorized capital, for the fulfilment of all the contracts duly booked by them. Whenever, therefore, a registered broker, who has to deposit ¥50,000 with the stock exchange in Tokyo, is guilty of default for bargains duly entered in his name, the exchange has to make good any loss entailed.

The Exchange Law

The revision of the Exchange Law put in force in 1922 is intended to reform exchanges on the model of the New York exchanges, to change the present joint stock company system into a membership system, to make brokers members of the Exchanges jointly and severally responsible for transactions on the market, etc.

Time Transactions.—Transactions in time bargains as recognized on the floor under the revised law are of two kinds, viz., short (next day) and long time delivery. In the former the contract is to be fulfilled within a week including the day of contract, while the latter is divided into 3 terms of 20 days each. Then the limit is 3 months for rice and wheat, 5 months for bean cakes, 6 months for silk yarns, and 12 months for raw cotton, cotton yarns and cotton cloth.

Stock, Rice and Merchandise Exchanges

Year	No.	Capital p. n. Yen 1,000	No. of brokers	Receipts Yen 1,000	Expenses Yen 1,000	Net profit Yen 1,000	Dividend Yen 1,000
1923...	33	90,075	1,265	20,690	8,817	—	10,945
1924...	32	90,145	1,246	18,405	7,271	—	8,954
1925...	32	90,171	1,098	19,962	7,475	12,486	10,490
1926...	34	97,121	1,137	24,650	8,791	15,859	12,156
1927...	36	92,363	1,073	—	—	—	—

Volume of Staple Commodities Transacted

Year	Stock 1,000	Rice 1,000 koku	Cotton yarn 1,000 bales	Silk 1,000 kin
1923	83,756	344,096	6,478	15,234
1924	77,060	294,771	5,183	18,917
1925	125,349	227,007	8,783	22,371
1926	166,965	181,511	13,146	36,104
1927	134,988	190,227	11,474	30,284

Note.—In the total "Stocks" represents exchanges of Tokyo, Osaka and other cities, while cotton yarns show transactions on the two exchanges of Tokyo and Osaka. The Yokohama silk exchange is the only one in this particular line.

Volume of Shares Transacted at Various Places (in 1,000)

Year	Tokyo	Osaka	Nagoya	Kobe	Kyoto	Total incl. others
1924	23,601	8,218	2,969	1,678	2,564	41,490
1925	39,515	12,700	3,727	2,258	3,568	64,076
1926	48,725	14,401	3,374	2,295	4,925	166,965
1927	39,550	9,476	1,382	327	2,012	134,988

Volume of Rice Transacted on Rice Exchanges

Year	Amount 1,000 koku	Of which Tokyo 1,000 koku	Of which Osaka 1,000 koku	Average quotation per koku Yen
1923	435,644	55,064	86,016	30.71
1924	294,771	53,981	88,229	36.60
1925	227,007	47,235	75,102	36.70
1926	188,479	43,560	68,339	37.44
1927	181,511	37,283	60,032	—

Proportion of Marginal and Actual Transactions.—According to recent returns the proportion of actual delivery in rice ranged, among the 34 rice exchanges in Japan, between the highest of 86 per 100 at Niigata and 73 at Sakata and the lowest of none at all at Himeji and Nagahama. At 29 places the delivery was less than 1%. The proportion is not so striking on the stock exchanges. At Tokyo the delivery was 35-40 per 100 under contract, about 30 at Osaka, but only 2 at Wakayama.

Tokyo Stock Exchange

Inaugurated in 1878, this is in Japan the oldest and largest establishment of the kind, with a paid up capital of ¥47,000,000. It is a joint stock concern and bound by law to guarantee the good faith of all parties concerned in transactions.

Brokers.—A person desirous to become a broker must deposit a cash security of ¥50,000. There is no legal provision limiting the number of brokers, but usage fixes it at 30 or thereabout.

Quotations of Leading Stocks at Tokyo and Osaka (1927-8)

Shares (time delivery)	Paid up per share Yen	Highest Yen	Lowest Yen	Rate of divd. 10 Percent	
				2nd half 1927	1st half 1928
At Tokyo:					
Nippon Yusen Kaisha.....	50	73.4	69.0	0.80	—
do. (new)	12.5	27.3	24.3	"	"
Kanegafuchi Cotton Sp. Co.	50	282.0	247.9	3.50	3.50
do. (new)	12.5	147.3	137.1	"	"
Toyo Spinning Co.....	50	208.9	186.5	2.50	2.50
Toyo Muslin Co.....	50	55.9	46.4	0.70	0.80
Nippon Sugar Mfg. Co.....	50	88.4	77.8	1.40	1.20
do. (new)	37.5	69.7	60.7	1.40	1.20
Meiji Sugar Mfg. Co.....	50	88.4	82.8	1.40	—
Dai Nippon Art. Fertilizer...	50	55.7	44.0	0.80	—
Nitto Seihyo (Cold Storage)	50	76.4	64.6	1.20	—
Nisshin Flour Milling Co....	50	106.6	98.5	1.60	1.60

Hokkaido Colliery & S.S. Co.	50	57.7	50.6	0.80	—
Asano Cement Co.....	50	87.7	63.0	1.50	—
Tokyo Elec. Light Co.....	50	56.9	48.5	0.80	0.80
Tokyo Gas Co.....	50	74.9	62.3	0.90	—
Oji Paper Mill Co.....	50	109.1	109.1	1.50	1.50
Fuji Gassed Yarn Co.....	50	67.8	53.3	0.80	0.80
Nippon Petroleum Co.....	50	63.7	55.1	0.80	—
Tokyo Stock Exchange.....	50	204.1	175.5	1.00	1.00
do. (new)	25	194.3	164.4	"	"
Dai Nippon Beer Brewery Co.	50	146.9	119.1	3.00	1.80
do. (new)	25	—	—	"	"
South Manchuria Railway Co.	100	—	—	—	—
Nichiro Fishery Co.....	50	115.1	95.7	3.00	2.25
Toho Electric Power Co.....	50	—	—	1.00	1.00
Katakura Filature	25	33.4	26.9	nil	0.80
At Osaka:					
Osaka Shosen Kaisha.....	50	50.0	46.3	0.60	—
Hanshin Electric Railway Co.	50	93.1	92.3	1.30	—
Ujigawa Hydro-Electric Co.	50	63.4	63.4	1.00	—
Daido Electric Power Co....	50	62.5	59.1	1.00	1.00
Godo Spinning Co.....	50	167.0	145.0	2.00	2.00
Toyo Cotton Sp. Co.....	50	205.7	185.5	2.50	2.50
Dojima Rice Exchange.....	50	109.3	99.0	1.10	1.00
Osaka Stock Exchange.....	50	112.0	98.9	0.55	0.50
Kuhara Mining Co.....	50	71.7	57.1	0.70	0.70
Taiwan Sugar Mfg. Co.....	50	87.7	83.3	1.20	—
Sembi Estate Co.....	20	40.8	35.0	1.20	1.00

Share Market in 1928.

The tone of the share market continued rather calm during the earlier period of 1928. The unemployed funds accumulating in the vaults of leading banks and trust concerns since the banking panic in the spring of the previous year has reached an enormous amount and with no particular demand for funds appearing in business circles the money situation became extremely slack. This abnormal circumstance temporarily favored the securities market, which came to present unusual activity from about the beginning of May. Owing to brisk purchases the market prices of securities, particularly national loan bonds, repeatedly made a leap during May and June. The buoyancy also benefitted the share market, which gradually assumed a strong tone from the latter part of June. With the return of good feeling to the market and the strong front taken by the bulls quotations took an upward turn and continued to advance day after day. Unusual activity was witnessed on the last day of June on the Tokyo Exchange, when almost all principal stocks bounded several points, spinning shares leading the rest with an advance of about ¥5.30, followed by the Dai-Nippon Brewery which advanced about ¥5.00. The Stock Exchange shares (Tokyo) were also largely in demand and rose about 5.00-5.30, the Nisshin Flour share also rising over ¥1.00. The index figure of principal shares during the half year period averaged 102.5 showing a gain of 1.0 over the corresponding period of the previous year. The favorable situation continued to prevail in the ensuing months with no unfavorable factors to dampen the bullish feeling of the market.

**Monthly Movement of Quotations for Forward
Delivery in 1928 (1st half, in yen)**

Tokyo Exchange		Jan.	Feb.	Mar.	Apr.	May	June
Old	{ High.	200.0	191.4	190.5	192.9	191.9	204.1
	{ Low.	186.6	185.3	175.5	182.0	182.5	185.5
New	{ High.	184.5	177.7	178.5	182.2	180.8	194.3
	{ Low.	173.4	172.3	164.6	170.0	173.2	175.6
Kanegafuchi							
Old	{ High.	260.1	253.8	262.8	263.4	264.8	282.0
	{ Low.	247.9	248.0	250.5	256.9	256.5	261.6
New	{ High.	145.8	143.1	144.1	143.9	143.4	147.3
	{ Low.	137.5	137.8	138.4	139.8	138.0	137.1
Dai Nip- pon Beer	{ High.	238.9	213.0	123.4	127.0	137.9	146.9
	{ Low.	213.6	119.1	119.5	120.0	127.7	135.3
Nippon Sugar	{ High.	86.7	88.4	87.2	83.9	84.5	82.7
	{ Low.	81.8	86.9	83.7	81.0	79.1	88.7
Asano Cement	{ High.	73.5	70.2	72.1	75.4	77.6	87.7
	{ Low.	66.1	63.0	67.5	71.7	73.4	75.7
Kuhara	{ High.	71.6	63.9	62.2	69.9	69.7	65.2
	{ Low.	62.3	58.1	59.0	57.2	57.3	57.5

WAREHOUSING

The progress made in warehousing recently is indicated by the following comparative figures showing the average volume of goods stored in 96 principal warehouses in Tokyo, Osaka, Kobe and other provincial centres: 1924—¥500,514; 1925—¥507,069; 1926—¥475,948; 1927—¥518,036; 1928 (June)—¥519,851. A few months after the economic debacle of March 1920, i.e., by July, the value of goods warehoused advanced to the enormous sum of ¥1,285 millions. The steady arrivals of speculative purchases contracted from abroad before the Armistice and the sudden fall of demand at home and elsewhere combined to bring about this congestion. Principal goods warehoused are compared as follows in (¥1,000):—

Items	1928 (June)	1927 (Dec.)	1926 (Dec.)
Rice	54,121	38,015	16,615
Rice (imported)	16,715	25,636	20,503
Flour	2,662	4,967	10,799
Sugar (crude)	3,011	834	1,753
Sugar (refined)	18,521	10,588	11,931
Silk fabrics	1,665	415	796
Cotton goods	36,682	29,461	27,526
Woolen fabrics	20,950	18,680	19,709
American cotton	27,851	38,528	7,004
Indian cotton	26,231	15,901	8,514
Silk yarn	24,336	70,957	72,824
Cotton yarn	11,266	17,425	4,348
Woolen yarn	13,020	11,638	5,486
Wool	41,835	21,095	18,782
Hemp and hemp goods.	1,340	1,867	1,821
Leather & leather goods	1,324	1,370	1,590

Foreign paper	26,252	28,226	27,096
Art. fertilizers	1,746	3,096	2,430
Iron materials	6,294	6,815	5,910
Hard ware	6,001	10,833	8,581
Drugs and dyes.....	4,453	8,708	14,293
Total incl. others...	519,851	518,036	475,948

MERCANTILE AGENCIES

The Tokyo Koshinjo (Mercantile Agency)—est. 1896

Established under the promotion of the twenty-six leading banks in Tokyo and Yokohama, including the Bank of Japan, its members are divided into promoters and special and ordinary members. They pay annual subscriptions ranging in amount from ¥200 or more to ¥25, besides paying a fee of 50 sen for each report submitted in answer to an inquiry. The promoters and special and 1st class ordinary members are entitled to make any number of inquiries and borrow, free of charge, one copy of "The Merchants' and Industrials' Credit Book" (a rating book), which is published by the Agency twice a year, while the others are allowed to forward inquiries within certain fixed numbers, which differ according to classes. The Agency issues a daily report written both in Japanese and English, which is sent free to its members, and which contains news of such occurrences in business circles as help them in the conduct of their business. The report also contains business statistics and other important matters relating to commerce and industry in general. Hand in hand with the sister institution of Osaka, it carries on an extensive business, and at present its business scope covers the whole of the country, with good correspondents in Europe, America, China and Korea. There is a foreign department established in its head office, to take charge of matters relating to foreign members. Officers: Mng.-Dir. S. Sato; Manager C. Nakajima. Head Office: 1 Mishiro-cho, Nihombashi, Tokyo.

Osaka Mercantile Agency (est. 1901)

Officers:—Mng.-Dir. Motoyoshi Makino; Manager, Naomi Abe.
Head Office:—Unago Nishino-cho, Minami-ku, Osaka.

GUILDS OF STAPLE COMMODITIES

The first legislative measure for encouraging the combination and harmonious working of those engaged in industry and trade was enacted in 1884. This was expanded in scope by the issue in 1897 of the Law relating to the Staple Export Guilds, and in 1900 of the Law relating to the Staple Production Guilds. At the end of Mar. 1913 the guilds existing throughout Japan numbered 916 with the volume of production or sale totalling ¥1,437,923,237 for 646 guilds reported. The number of guilds decreased to 872 and 865 in 1923 and 1924 respectively with a corresponding decrease in the members and amounts of production. The

principal production guilds as classified according to the kind of commodities handled were as follows at the end of year 1927: Rice & cereals, 59; Fertilizer, 32; Paper and paper ware, 35; Porcelain, 23; Medicine, 23; Dyeing & Weaving, 150; Timber, 46; Coal, Cokes, Charcoal & Firewood, 39; Soy and "miso," 37; Metal manufactures, 28; Matting, 23; Total including others, 874.

COMMERCIAL MUSEUMS

Of the commercial museums existing in Japan those that are worthy of mention are the Government Com. Museum, the Tokyo Industrial Association's Com. Museum and the Osaka Com. Museum.

The Govt. Commercial Museum

Founded in 1896, the Museum, besides placing on view commercial samples both domestic and foreign, undertakes inquiries on commercial matters and acts as intermediary between Japanese and foreign merchants or manufacturers. The Museum is provided with tens of thousands of samples, both of domestic and foreign origin, which are loaned to the provincial museums or fairs. Sometimes they are taken round the country and placed on view on occasion of local fairs and shows. The Museum undertakes intermediary service in the interest of international commerce and industry, and correspondence sent to foreign merchants, manufacturers or to their confreres in Japan constitutes an important branch of its work which also includes replies to foreigners' inquiries as to standing, etc. of Japanese merchants, manufacturers and firms. The Museum is free of access. Location: 1-chome, Kobiki-cho, Kyobashi, Tokyo.

PRICES OF COMMODITIES

According to the returns of the Oriental Economist the average index figure of the wholesale prices in Tokyo for the 1st half of 1928 was lower than in the same period of '27, January figure standing at 177 against 182 of the previous year, taking the average at the end of 1913 as 100. The situation has since made further downward movement as shown below:—

Index Figures in Recent Years Compared

Year	Jan.	Mar.	May	July	Oct.	Dec.
1925	228	219	212	213	214	208
1926	208	198	191	194	187	182
1927	182	184	185	181	177	178
1928	177	174	176	175	—	—

Wholesale Quotations of Staple Commodities

(Average in Dec. 1926 & '27)

	1927	1926
Kyushu Coal (per 10,000 "kin," 1st class)...	¥20.00	¥18.00
Petroleum (per case).....	7.00	6.20
Muslin (per yard).....	15.00	15.48

Cotton (2nd class).....	—	47
Sugar (Refined) B. H. per 100 "kin".....	23.85	24.30
Wheat.....	7.85	7.70
Flour (one bag).....	3.92	4.04
Iron (per 1 ton).....	51.00	51.00
Cement (per 380 lb.).....	5.30	6.00
Cryptomeria timber.....	13.20	13.20
Rice (staple per 1 "koku").....	31.20	34.00

MOVEMENT OF STAPLE COMMODITIES IN 1928

Rice

The tone of the market continued dull almost throughout the period and quotations remained weak on account of oversupply. Indeed, owing to the unusual abundance of the previous year's crop and a large quantity of old rice stored in the Government warehouses the supply was more than enough to cover the demand for the year's consumption so that the tone of the market continued weak since the latter part of the previous year, quotations ruling below ¥32 level. To check the inflow of foreign rice and arrest further fall the Government applied restriction to the importation of foreign produce. Nevertheless, the situation little improved, the quotations falling below ¥31 level in July. However, there occurred a setback in the latter part of August as a result of a long spell of unusually low temperature in the mid-summer, and a pessimistic outlook as to the result of the coming harvest. This combined with the appearance of bullish purchases on the market suddenly reversed the situation and pushed up the quotations in the early part of September. Prices on the Tokyo exchange kept rising day after day, the maximum rate ruling at ¥37.50 and ¥38.80 per koku for Sept. and Oct. delivery respectively. The unusual buoyancy which is believed to have been created by cornering, however, subsided in about ten days when the prices dropped with the return of favorable weather, and settled down at the normal level of ¥33 or thereabout.

Movement of Quotations on the Tokyo Exchange

(Standard quality in yen per "koku" or about 4.96 bushels)

1927		Jan.	Mar.	May	July	Sept.	Dec.
Current month	{ High.	35.75	37.34	38.49	37.76	34.45	29.49
	{ Low.	33.40	36.60	36.65	33.00	32.61	27.70
Forward.....	{ High.	36.67	38.42	39.45	37.90	32.75	30.18
	{ Low.	34.41	37.51	37.25	32.91	30.80	28.35
1928 (1st half)		Jan.	Feb.	Mar.	Apr.	May	June
Current month	{ High.	31.14	31.39	31.35	31.48	30.76	31.48
	{ Low.	29.33	30.39	30.65	30.30	29.96	30.10
Forward.....	{ High.	31.88	32.19	31.93	32.10	31.45	32.09
	{ Low.	30.47	31.29	31.13	30.60	30.48	30.53

The stock that existed on July 1 throughout the country stood at about 23,563,175 koku according to official estimate, the figure consisting of 22,472,673 koku of domestic rice and 535,406

koku of foreign rice. Compared with the previous year's record it shows a gain of $13\frac{1}{2}$ per cent. or over 2,788,000 koku. Estimating the imports of Korean and Formosan rice during the rest of the season at about 2,440,000 koku and the consumption during the period at about 18,950,000 koku, it was thought that a surplus stock of about 6,800,000 koku will be carried forward to next year. The prospective yield of this year is estimated at 61,290,260 koku according to the 1st official returns, it being about 3,293,000 more than the average figure of the past 5 years actual yield. Estimating the consumption and exports for next year at 70,536,000 and 1,000,000 koku respectively there will result a surplus of about 8,260,000 koku left over.

(in 1,000 koku)

	Actual yield	Remainder of previous year	Import	Export	Consumption
1923	55,444	6,789	1,620	35,277	66,724
1924	57,170	5,210	3,328	25,061	65,800
1925	59,703	5,618	5,136	38,760	67,061
1926	55,583	5,967	2,142	47,142	68,249
1927	62,101	5,968	4,129	35,138	67,201
1928	*61,000	—	—	—	—

* 1st estimate.

Cotton Yarns.

The slump in the American cotton market due to the decline of demand the world over and the slack trade in cotton manufactures at home adversely affected the cotton yarn market which remained very inactive during the earlier months of '28. Quotations ruled very low especially in January and February when the bottom price of ¥209.10 was quoted, a drop of about ¥50 below the figure of December '27. Better prospect came on later with the improved situation in the American cotton market and the gradual revival of exports to China following the temporary lull of domestic disturbances in that country. However, this favorable turn was only short-lived, and toward the end of June there occurred a set-back with the outbreak of the Tsinan Affair which occasioned the usual boycott agitation against Japanese merchandise. This unwelcome occurrence and the frequent fluctuations of exchange rates combined to impede the export trade, and again plunged the market into gloomy groove. The hopeful condition of the American cotton crop and the consequent depreciation of cotton prices further dampened the tone of the market here, quotations falling about ¥48 in July. Later with the gradual diminution of output and the digestion of stocks the situation began to improve from about the beginning of October, though the export situation remained as slack as ever. The movement of the forward delivery on the Osaka Sampin Exchange (in Yen per bale) is as follows:—

1927:	Jan.	Mar.	May	July	Sept.	Nov.	Dec.
Highest	201.40	221.50	224.80	245.50	260.90	253.40	255.30
Lowest	190.50	206.00	214.10	224.50	247.00	245.90	246.90

1928 (1st half)	Jan.	Feb.	Mar.	Apr.	May	June
Highest	250.50	228.60	238.80	244.90	248.10	254.70
Lowest	213.60	207.50	222.70	228.70	239.90	141.20

Raw Silk

The volume of raw silk exported in the last season (July 1, '27, to June 30, '28) reached 518,173 bales, the largest figure ever recorded since the inauguration of the trade. The figure is a gain of 21,433 bales (about 4%) on that of the previous season. The arrivals at the ports of export, Yokohama and Kobe, also increased, the total aggregating 916,363 bales or 83,366 bales (about 9%) more than the figure for the previous season. The following statistics gives comparative figures for the past three years:—

Arrivals:	1924-25	1925-26	1926-27	1927-28
Yokohama	575,579	641,805	685,469	712,264½
Kobe	98,398	115,427	147,528	204,098½
Total	673,977	757,232	832,997	916,363
Export:				
Yokohama	348,144	359,777	401,418	399,150
Kobe	58,669	68,101	95,422	119,022
Total	406,813	427,878	496,840	518,173 ✓
Value (¥1,000)	32,437	881,916	758,086	—
Value per bale (Yen)	1,870	2,061	1,772	—

The market situation in the 1927-28 season was even worse than in the previous season. Though the volume of exports reached the largest figure on record the prices quoted were on lower level. Occasional large orders from America and Europe pushed up prices to some extent but hardly enlivened the tone of the market which, on the whole, remained dull throughout the period. The average price of the best standard goods for the season was ¥1,388 per bale, the lowest figure ever known since 1920 and about 10% lower than the similar figure of the previous season. The downward tendency was further intensified in the new season that opened in June '28 when quotations fell below ¥1,300 mark, and with only a slight recovery about the middle of July the market relapsed toward the end of the month, the quotations for current and future delivery in July and August dropping ¥40-50 and ¥30-40 respectively compared with the figures of the preceding season. For this adverse tendency over-production in recent years, the pressure brought upon by artificial silk, the fluctuations of exchange market, etc. are chiefly responsible. The volume of sales in the 1927-28 season reached 875,143 bales against 832,997 bales of the previous season. The movement of prices for the best quality at Yokohama in the 1927-28 season is shown below (in Yen per bale containing 100 kin):—

	1927 June	Aug.	Oct.	Dec.	1928 Feb.	Apr.	May
High.	1,480	1,350	1,330	1,310	1,380	1,380	1,380
Low.	1,390	1,280	1,280	1,270	1,330	1,330	1,350

The quantities of silk shipped by principal silk firms during the 1927-28 season are as follows (in bales):—

Shippers	For U.S.A.		For Europe		Total
	Yokohama	Kobe	Yokohama	Kobe	
Mitsui Bussan	81,654	35,524	3,386	405	120,969
Hara & Co.....	33,667	—	1,657	—	35,224
Nippon Kaito Kaisha.....	60,677	15,450	1,188	134	77,449
Japan Cotton Trading Co.	35,602	14,473	375	20	50,470
Gosho Corporation	14,645	5,220	30	—	19,895
Nichibei Kaito Kaisha....	17,822	—	—	—	17,822
Asahi Silk Co.....	59,316	40,471	—	—	99,787
Katakura Seishi	18,162	—	—	—	18,162
Sieber Hegner Co.....	9,468	—	7,903	—	17,311

The total amount shipped by Japanese firms during the period under review was 453,178 bales (87% of the total shipment) against 64,995 bales (13%) shipped by foreign firms, the figures showing increase of 2% and decrease of 2% respectively on the previous figures. In the amount handled the Mitsui Bussan heads the list with 120,969 bales followed by the Asahi Silk with 99,787 and the Nippon Kaito with 77,449 bales. Noteworthy is the record attained by the Asahi Silk whose position in the trade was rather insignificant until a few years ago. The silk-reelers who exported over 10,000 boxes (about 6,000 bales) during the period are: Yamaju-gumi, Gunze Seishi Kaisha, Ogushi-gumi, Yodasha, Ishikawa-gumi, etc.

Average Price of Raw Silk

Average spot prices per 100 kin of raw silk of Futolito Best No. 1 by steam filature as quoted at Yokohama are respectively as follows for the highest, lowest and average:—

Year	Highest	Lowest	Average
1922	¥2,155	¥1,645	¥1,917
1923	2,360	1,852	2,136
1924	2,126	1,478	1,837
1925	2,108	1,823	1,966
1926	1,924	1,444	1,612
1927	1,720	1,400	1,461

N.B.—The highest and lowest show the average of 12 months for each year. The standard goods were "Mari" and "Hagoita" brands for 1927.

Silk Conditioning

Destroyed by the earthquake-fire the new Yokohama Conditioning House was reconstructed in 1926. The main building is a 4-storied ferro-concrete structure covering 3,200 sq. yd. It has behind it four warehouses standing in a row to ensure the safety of the silk bales stored against disaster from fire.

The Kobe Conditioning House that was closed in 1901 after running about five years as a Government institution was revived, this time as a municipal undertaking, in January 1925 in consequence of the strong stimulus which the districts forming the western half of Japan proper received on the occasion of the Earthquake disaster in 1923 in the region round about Yokohama.

Japanese and Foreign Exporters

The part played by Japanese in the direct export of raw silk is steadily gaining ground, the Mitsui Bussan, the Asahi Silk Co., the Nippon Kito Co., and the Hara Gomei representing direct export trade in raw silk by the Japanese merchants.

Year	No. of bales exported	Of which Jap. firms	Of which foreign firms	Percentage	
				Japanese	Foreign
1923-24	288,035	209,007	48,331	82%	18%
1924-25	406,812	334,441	72,371	82%	18%
1925-26	427,878	380,144	67,734	84%	16%
1926-27	496,740	423,925	72,815	85%	15%
1927-28	518,173	453,178	64,995	87%	13%

*Note:—The season is reckoned from the 1st of July to the 30th of June the following year.

Yokohama and Kobe as Export Centres of Silk

The disaster that befell Yokohama in 1923 and the temporary crippling of its operation as the sole export centre of silk in Japan has resulted in carrying to realization the long cherished wish of Kobe merchants and silk reelers in adjoining districts to export this foremost export of Japan on two-port policy. The total export of silk during 1927 was 399,150 bales (77%) from Yokohama and 11,923 bales (23%) from Kobe, the former being a decrease of 2,168 bales and the latter an increase of 23,600 bales, compared with the figures of the previous year. The strength of Yokohama as silk port lies first in its longer history, closer relation to America, the foremost consumer of Japanese product, better banking facilities afforded to silk dealers, and lastly in commanding the support of the most important centres of production, as Nagano, Yamanashi, etc.

Flour

During the latter half of 1927 the flour market presented an unusual activity, quotations ruling high throughout the period. Though the tone of the market became somewhat weak later the milling concerns enjoyed remunerative business unexperienced for several years past chiefly because they could depend on the supply of domestic wheat at comparatively low price. The situation continued favorable to the producers during the first half of '28, quotations remaining firm due to the strong tone of foreign market and the conventional rate maintained by the mills. However, the business was anything but brisk because the low price of rice impeded the growth of demand for the goods, the result being that in actual transactions quotations always stood below the market price which was rather nominal. The hopeful condition of American and Canadian wheat crop, which was reported to be unusually abundant, interfered with the tone of the market about the middle of July and precipitated a slump, quotations falling to ¥2.72 (max.) and ¥3.63 (min.) against ¥4.18 and 3.95 respectively quoted about the same period of the previous year.

**Monthly Movement of Flour (Bamboo brand,
in Yen per bag)**

1927:	Jan.	Mar.	May	July	Sept.	Dec.
Highest	3.95	4.09	4.28	4.12	3.97	4.00
Lowest	3.86	4.05	4.17	3.99	3.80	3.95
1928 (1st half):	Jan.	Feb.	Mar.	Apr.	May	June
Highest	4.00	4.00	4.10	4.16	4.15	3.86
Lowest	3.96	3.96	4.11	4.02	3.90	3.65

Copper

Until about 1923 Japan was a supplier of copper, brass, bronze and manufactures thereof, and the country was hardly in need of importing these goods from abroad. After the European war, however, a large stock was left in the market the world over, with the result that there occurred re-importation of the goods to this country. To provide against dumping the Government raised the import duty on them in March '23, the duty on ingots and slabs from ¥1.20 to ¥7.00 per 100 kin. At the same time a drawback of ¥5.80 was allowed on the export to cover the whole import duty.

The supply and demand relation on the market has slightly improved since the end of 1927. The stock at the end of Feb. '28 decreased to about 3,400 tons from over 5,000 tons as at the end of the previous year. The decline is due to the falling-off of exports. The amount of yearly consumption remained unchanged.

The output, import, export, etc. recently are given below (in English tons):—

Year	Output	Import	Export	Consumption	Stock
1924	61,534	6,090	324	64,785	9,142
1925	63,513	3,138	266	70,278	5,249
1926	63,375	13,910	134	76,915	5,485
1927	60,460	9,637	76	70,743	4,764
1928 (May)	25,926	2,591	7	31,276	—

The movement of quotations in 1928 (1st half) is shown below:—

T copper per 100 kin	Jan.	Feb.	Mar.	Apr.	May	June
Highest	¥52.00	51.50	51.50	50.50	52.50	52.50
Lowest	52.00	51.50	50.50	50.50	50.50	50.50

T copper per 100 kin	1923	1924	1925	1926	1927	1928
Highest	¥65.0	61.0	65.5	60.0	53.00	52.50
Lowest	55.0	56.5	53.0	54.0	50.50	50.50

Iron

The fact that Japan is not self-sufficient in the supply of both pig iron and steel, leaves her market always threatened by Indian pig iron and European steel. In 1926 the import price of the former was about ¥2 lower than in the preceding year, while that of the latter made a sharp fall of ¥20 so that the home

producers were placed in a very difficult position. As a counter-measure against the dumping of European goods, the government effected a revision of the Iron Industry Encouragement Law, providing for ¥3.6 per ton subsidy to pig-iron and raising the duty on ordinary steel from 15% ad valorem to ¥18.62.

Prior to 1922 the home production stood below the volume of imported goods each year, but the situation was reversed in 1923. Since then imports gradually fell off while the home output was larger than imports in volume except in 1924 when with the sudden growth of demand on account of the reconstruction requirements a large quantity of foreign goods arrived. The increase of import duty, improvement in the demand and supply relation, formation of steel trust in Europe, fall of the exchange rates and other favorable factors combined to further enliven the market which began to take a turn for better from the spring of '28 after an interval of slack business experienced in the latter part of '26 and earlier period of '27. The pressure brought upon the Japanese steel market by the dumping of the European steel, which hitherto threatened the market here, has been largely mitigated on account of advanced cost of production in Germany, the increasing demand in Europe and the growth of exports to the South Seas and Asiatic continent, while at home the demand continues to increase with the progress of reconstruction and the activity of railway construction and ship-building. The following table shows the situation of supply and demand in recent years:—

Supply and Demand of Steel (French ton)

	Output	Import	Export	Demand	Percent. of output to demand
1922	662,092	1,100,838	82,168	1,680,762	40
1923	819,694	799,177	97,506	1,521,364	54
1924	906,280	1,154,402	88,800	1,971,882	46
1925	1,102,883	532,891	98,218	1,537,556	72
1926	1,330,680	924,731	120,389	2,135,022	62
1927	1,400,416	902,412	155,743	2,147,085	65
1928 (Up to Apr.)	538,826	315,531	6,404	847,953	—

Quotations assumed a firm tone in March '28, steel bar rising to ¥3.60 and thin plate to ¥3.70. In June, prices went up by ¥4.00 for both, showing a gain of 17-19 and 16-17 per cent. respectively over figures of the corresponding period of the previous year. Movements of some kinds of steel are given below:—

Pig-iron (Kamaishi No. 3, in yen per ton)

	Jan.	Mar.	May	July	Sept.	Dec.
1926	51.00	50.00	50.00	50.00	50.00	51.00
1927	51.00	51.00	51.00	51.00	51.00	51.00

Steel bar (4 "bu" spare, in yen per 10 "kan")

1926	4.25	4.20	5.10	4.60	3.73	3.65
1927	3.40	3.30	3.30	3.30	3.30	3.50

Tin plate (4 ft. x 8 ft. x 1 "bu," in yen per 1 case containing 224 sheets=170 pounds)

1926	27.00	27.30	25.50	25.30	25.50	25.50
1927	24.50	24.00	22.80	22.80	22.50	22.30

Coal

The coal trade had been in a depressed state since 1921, and the market was barely kept from falling off by the restriction of output at various centres. Signs of improvement became noticeable for the first time toward the end of 1925, and even in the summer of 1926 the market remained firm despite the usual dull season, this favorable tone holding throughout the year and the following year. The prices in November '27 recorded an average rise of from ¥1.00 to ¥2.00 over the figures in the same period of the preceding year. The movement of some standard goods is as follows (in yen per ton):—

	Chikugo arrivals at W. Kamabai		Hokkaido (c. a. h. 1 Muroran)	
	1st class lump	dust	lump	dust
1927				
Spring	22.40	15.80	22.50	16.30
December	22.75	17.50	23.00	17.00

	Joban an'hracite (at pithend)	
	1st class lump	dust
Spring	10.80	6.00
December	19.00	7.00

The favorable turn may chiefly be attributed to the stricter limitation of shipment carried out throughout the country since 1926 as well as the growth of home demand.

Below is given the situation of supply and demand in the last three years (in 1,000 tons):—

Year	Output	Import	Stock	Export	Estimated Consumption
1925	31,459	1,740	1,909	2,694	29,903
1926	29,625	2,012	2,511	2,590	30,184
1927	31,200	1,051	1,756	2,174	31,429

Sugar

The growth of the world sugar production in recent years has adversely affected the sugar market in this country, the prices tending downward since the autumn of '27 chiefly on account of over-supply. Quotations which ruled at ¥24.80 (highest) in January '27 fell to ¥22.50 in January '28, and the bottom price of ¥20.60 was quoted in July. During the interval signs of slight improvement were in evidence in March when quotations stiffened somewhat, but for a short while. The cancellation of the agreement for the reduced production which the sugar concerns had observed for some time past and the consequent free actions taken by the cos. resulted in the over-production of centrifugals and invited a slump. To tide over the difficulty and improve the situation the cos. arranged a fresh agreement for the curtailment of output and at the same time their selling agents also entered upon an agreement fixing the minimum rate for sale at ¥21.50 as a measure to check further depreciation. The measures had the desired result and the prices gradually recovered toward the end of August, by

about ¥1.00 as compared with July figure, quotations in the early part of September ruling at ¥21.50. Centrifugals also recovered over ¥2.00. In view of the steadily increasing consumption at home and the gradual diminution of stocks further advance in prices was anticipated toward the close of the season. Still the future tone of the market depends on the result of the production of Java sugar which is a chief controlling factor. The movement of quotations during the period is shown below (in Yen per picul):—

Refined (Y D)

1923	Jan.	Feb.	Mar.	Apr.	May	June	June	Aug.
High	23.00	23.20	22.60	22.50	22.70	22.40	22.20	21.80
Low	22.50	20.00	22.10	22.00	22.30	21.20	20.60	20.70

Centrifugals

High	20.50	19.90	17.70	17.25	17.20	16.75	16.60	18.10
Low	19.80	17.50	17.10	16.80	16.95	16.10	16.05	16.90

CHAPTER XXXV

FOREIGN TRADE

INTRODUCTORY REMARKS

The publication of Japan's customs reports in statistical form dates from 1868. In those days Japan was an agricultural country and her manufacturing industry was little more than a fireside industry intended to meet only the domestic demands. Consequently, farm produce such as rice, vegetable, leaf tobacco and tea, and sericultural and marine products, and minerals such as coal and copper made all the staple exports of the country, while for the supply of wheat flour, sugar, leather, medicines, dyes, paints, drapery, hardware, clocks, arms, and other manufactured articles the country had to draw from abroad. Such being the case, for the succeeding fourteen years (1868-1881), imports exceeded exports every year, except in two of them, so that the balance of trade continued unfavorable.

In the meantime, however, the awakening of the nation and the encouragement of industry by the authorities joined in causing manufacturing enterprises of a new type to spring up in different parts of the country. The establishment of cotton-mills, among the rest, marked a turn of the tide. The period from 1882 to 1895 saw the import of cotton yarns and stuff gradually falling off and the export of those of coarser description increasing. Raw silk woven into "habutae" and also matches, china, lacquer-ware and other industrial products, and coal and copper began to make their way to foreign markets, but as the imports remained relatively stationary the balance was in favor of exports during this period of fourteen years (two years excepted, when imports were in excess).

The trade movement again took an adverse turn after the Sino-Japanese war of 1894-95, for the success which attended our arms relaxed the spirit of self-restraint that had been so conspicuous during the war; it now gave way and was followed by a wave of extravagance. This visibly affected the balance of trade in 1896, and so another period of excess imports set in and lasted till 1914, the year of the outbreak of the European war.

Meanwhile, in 1899, the enforcement of the revised commercial treaty doubled or trebled the tariff to what it was before, and consequently affected the prices of commodities in Japan. This condition of affairs after all served to encourage the importation of foreign goods. On the other hand, the protection afforded by the high tariff well stimulated the rise of new manufacturing enterprises, which, with the aid of useful machinery introduced from Europe and America, progressed with long strides. In manufacturing, however, Japan, as she is still today, was seriously handicapped, for raw materials are scarce in the country, and they have to be imported, especially fibres,

rubber, skin and bone, pulp, ores and other metal materials. The two years of the Russo-Japanese war, 1904-5, occasioned enormous purchase of military supplies. All these facts help to account for the fact that for nineteen years (excepting two of them) from 1896 to 1914 the customs reports recorded adverse results almost without a break.

The European war had, on the whole, a beneficial effect on the industrial development of Japan, for England, France, Italy, America and Germany, drawn into the vortex of the catastrophe, could no longer play a predominant part in the manufacturing industry of the world. The consequence was that Japan was left the only producer to supply the shortage of goods in Far Eastern market, even to fill orders from the Allies. Then to encourage production at home and its shipment to foreign markets, the authorities did their best to extend banking facilities. In these circumstances, during the four years from 1915 to '18, a favorable balance of trade was realised to the extent of over ¥1,400,000,000 (\$700,000,000), which, however, is only one-eighteenth of that of America, whose excess exports during the period from July, 1915 to June, 1919 totalled \$12,800,000,000.

With the restoration of peace Japan's trade relapsed into its ante-bellum condition, imports continuing to exceed exports every year, and this one-sided trade was aggravated by the calamity of 1923.

Heavy Excess of Imports.—From 1915 till 1918 the trade balance was in Japan's favor, but from 1919 the relation was reversed. The adverse balance for the nine years (1919-27) has reached the enormous figure of over 3,050 million yen, while for Chosen and Taiwan similar excess amounted to over 700 million yen. The figures for last ten years are as follows (in ¥1,000,000):—

Year	Exports	Imports	Total	Excess of Imports
1919	2,180	2,225	4,406	45
1920	2,040	2,379	4,419	339
1921	1,309	1,677	2,986	368
1922	1,683	1,954	3,637	271
1923	1,448	1,982	3,430	534
1924	1,807	2,453	2,260	646
1925	2,306	2,573	4,879	267
1926	2,045	2,377	4,422	333
1927	2,065	2,357	4,422	292
1928 (1st half).....	943	1,179	2,122	236
Total excess of imports.....				3,331

LEGISLATIVE MEASURES PERTAINING TO CUSTOMS TARIFF

The Tariff Law Revision in 1920

Persuaded by the loud cry for protecting our younger industries threatened with ruin by the economic depression as well as the primary industries against dumping of low-priced Western goods, and also in consequence of the raising of the tax on saké and other liquors, the authorities in the 43rd extraordinary

session of the Diet (July 1-29, '20) adopted a bill for effecting numerous important amendments to the import tariff law which was originally enacted in 1910. These amendments were made effective on August 1, '20.

Principal features of the revision are:—

1. In case of imminent danger to industries of importance in this country by reason of imports of goods at unreasonably low prices, or by the sale of such at unreasonably low prices, the goods in question shall be submitted for examination to the Committee on Dumping, and following their decision, the goods shall be surtaxed.

2. Mineral oils with specific gravity in excess of 0.904 at 15 degrees Centigrade to be used as fuel have been rendered duty free, provided that it is imported with the permission of the Government.

3. Animals for breeding purposes and protective serum or vaccines against animal plague, imported by industrial corporations or persons authorised by the Government have been rendered duty free.

4. Articles imported for the purpose of display at exhibitions, exhibitions and fairs have been rendered duty free, provided that security corresponding in amount to the duty is deposited at the time of importation.

5. The rate of duty on dyes and chemicals has been raised to ad val. 35% (heretofore 10.20%).

6. Duty on metal or wood machinery has been raised about 30%.

7. Duty on beverages has been raised in accordance with the increased tax on them.

8. About forty items of raw materials such as silkworm egg-cards, salt, tallow, minerals, ores and metals have been placed on the free list.

Tariff Revision in 1926-7

The customs tariff practically left in the shape as revised in 1910, only partial alteration being made now and then, received thorough remodelling in 1926, in view of the marked economic change both at home and abroad after the European war, and especially of the prevailing practice the world over to raise protective barrier. Slight amendments were also made to the clauses of the tariff law at the same time.

The new tariff has affected the rates of import duties on a majority of 647 articles enumerated in the former tariff schedule. The principle followed in the revision was the adoption of specific duty instead of ad valorem duty in most of the dutiable goods; the lifting or lessening of duty on articles of daily necessity and on raw materials whereby to protect and nurture further development of important domestic industries, attention being also paid to the equalization between specific and ad valorem duty. By the revision the Government expects an increase of approximately ¥7,500,000 in the customs revenue for 1926 and an annual increase of about ¥19 million for the ensuing years. A partial revision in the tariff schedule affecting a few articles

enumerated therein was made in March '27. To keep pace with the revision in the sugar excise the duty on sugar of over No. 11 Dutch standard was raised to ¥3.95-5.30 per 100 kin. The duty on corn starch was lowered to ¥2.30 from ¥4.55 per 100 kin, while the duties on tapioka, manioka & sago increased to ¥1.80 from ¥1.00; butter to ¥36.90 from ¥29.60; olein to ¥7.60 from ¥5.00. A duty of ¥0.60 per 100 kin was created for Kasavarit, while sulphide cobalt was made duty-free.

The text of the tariff law as last revised in 1926 is given hereunder with an extract of the tariff schedule revised in 1926 and 1927.

Customs Tariff Law

(Originally promulgated on the 15th April, 1910)

Art. I.—Customs duties shall be imposed according to the annexed tariff upon articles imported from foreign countries.

Art. II.—Duty upon an article subject to an ad valorem duty shall be levied according to the value on arrival at the time of importation.

Art. III.—With regard to articles produced or manufactured in the regions which do not enjoy the benefit of special conventional arrangements, a benefit not exceeding the limits provided for in those arrangements may, if necessary, be extended to such articles, designating the regions and articles by Imperial Ordinance.

Art. IV.—With regard to articles produced or manufactured or exported from, or coming through a country which discriminates against Japanese vessels, produce, manufactures or exports, or articles coming through Japan, the customs duties not exceeding the value of such articles can be imposed, in addition to the rates specified in the appended tariff, the kinds of articles to be so treated being designated by Imperial Ordinance.

Art. V.—In respect of articles on which an export bounty is granted in foreign countries, a customs duty of the same amount as the said bounty may be imposed by Imperial Ordinance, in addition to the duty prescribed in the annexed tariff.

Art. V-2.—When important industries in Japan are threatened by the importation of unreasonably cheap articles or the sale of imported articles at unreasonably low prices, the Government may, under the regulations provided by Imperial Ordinance, specify such articles, after submitting the matter to investigation by the anti-Dumping Committee, and impose upon them during a certain fixed period of time duties not exceeding in amount their proper prices, in addition to the duties prescribed in the annexed tariff.

In case the articles specified under the provisions of the preceding paragraph have already been imported and are in possession of a dumping seller or his agent, the additional duties may be collected, according to the provisions of the preceding paragraph, from such seller or his agent.

The collection of such duties shall be conducted according to the provisions governing the collection of national taxes.

Art. VI.—The import duty on rice and paddy may, in case of failure of crops, be reduced by Imperial Ordinance to a rate not falling below forty "sen" per hundred "kin" for a period to be fixed by the Ordinance.

Art. VII.—The following articles are exempted from import duties:—

1. Articles for the use of the Imperial Household;
2. Articles belonging to chiefs of foreign states, their families, and suites, visiting Japan;
3. Arms, ammunition, and explosives imported by the Army or the Navy;
4. Mineral oils imported for use as fuel by the Government;
- 4-2. Mineral oils for direct use as fuel with a specific gravity exceeding 0.904 at 15 degrees Centigrade provided it is imported with the permission of the Government, according to the provisions of the ordinance.
5. Warships;
6. Articles for private use by the foreign Ambassadors and Ministers and other envoys of similar status accredited to Japan, and articles for official use belonging to the Embassies and Legations in Japan. As regards the countries which enforce discriminating treatment against Japan in this connection reciprocal conditions shall be attached.
7. Articles for personal use of the members of the Embassies and Legations in Japan of those countries which extend reciprocal treatment to articles for similar use of the members of the Japanese Embassies and Legations, and articles for official use of the Consulates in Japan of those countries which extend reciprocal treatment to articles for similar use of the Japanese Consulates;
8. Orders, decorations, medals and badges conferred upon persons resident in this country;
9. Records, documents, and other papers;
10. Samples for exhibition at Government or private schools, or public institutions such as museums and exhibition halls, or private schools officially designated, for which the permission of the Minister of Finance has been obtained.
- 11-2. Utensils for ritual and purposes of worship, which are donated to shrines, temples, churches and chapels.
11. Articles donated for charity or relief purposes or articles contributed to orphanages, homes for the aged, and charity hospitals for use for bona fide charitable purposes.
12. Government monopoly articles imported by the Government;
13. Samples of merchandise which are only fit to be used as such;
14. Travellers' effects, and tools and instruments of professional necessity to travellers, in so far as they correspond to the social status of such travellers and are recognized as reasonable by the Customs;

15. Articles sent home by troops, warships or government offices abroad;
16. Effects of persons changing their residences, provided that such effects have already been used;
17. Exported articles which are re-imported within five years without any change in the character and form as at the time of exportation, excepting, however, alcohol, alcoholic liquors, sugar, and articles which were exempted from import duties or granted a drawback thereof under Art. VIII or Art. IX;
18. Receptacles of exported goods designated by ordinance when such receptacles are re-imported, excepting, however, those exempted from import duties under Art. VIII;
19. Fish, shell-fish, mollusca, sea-animals, sea-weeds, and other aquatic products caught or gathered by vessels which set out for the purpose from Japan, and their manufactures of simple process, provided that they are imported by the same vessels or vessels attached thereto;
20. Articles for delivery to warships and steamers abroad for use on board. Articles specified in Article X are, however, excepted;
21. Wreckages and equipments of shipwrecked Japanese vessels;
22. Articles brought back because of shipwreck of the vessels on which they were shipped from Japanese ports, excluding those articles which have been exempted from the import duty or for which the duty has been refunded in accordance with Article VIII or Article IX;
23. Animals for breeding purposes and protective serums or vaccines against animal plague, imported by either the national or local government, or industrial corporations or persons authorized by the Government.

Art. VIII.—The following articles are exempted from import duties if they are to be re-exported within one year from the date of importation; provided, however, that the importer may be required to submit security corresponding to the amount of the duties at the time of importation;

1. Articles imported for the purpose of having work done thereon, which are designated by ordinance;
2. Receptacles of imported goods designated by ordinance;
- 2-2. Articles to be used as receptacles of export goods and designated by ordinance;
3. Articles imported for repair;
4. Articles imported for the purpose of scientific research;
5. Articles imported as articles for trial;
6. Samples imported for the purpose of collecting orders;
- 6-2. Articles imported as samples of manufactures;
7. Articles for use in public performances imported by travelling public entertainers upon their arrival in Japan;

8. Articles imported for the purpose of exhibiting at expositions, competitive or prize shows, etc.

Art. IX.—Import duties on materials for manufacturing export articles designated by ordinance may be exempted or refunded, wholly or partly, according to the provisions of ordinance.

For "tea lead" and zinc sheets of a thickness of not exceeding 0.17 millimetre, which are imported as raw materials, or articles officially designated, which are used for the manufacture of oil or rape-seed cake, the whole or part of the import duty can either be remitted or refunded according to the rules to be laid down by order.

In case import duties are exempted according to the provisions of the preceding two paragraphs, the importer may be required to submit security corresponding to the amount of duties at the time of importation.

Any person who obtains or attempts to obtain fraudulently or illegally the refundment mentioned in 1 or 2 of this Art. shall be dealt with according to the provision of Art. LXXV. of the Customs Duties Law.

Art. X.—Iron or steel materials, equipment, parts of equipment, engines or parts of engine, which are to be used for ship-building or repair, and designated by ordinance, may be exempted from import duties according to the provisions of ordinance.

Art. XI.—The importation of the articles specified hereunder is prohibited:—

1. Opium and utensils for smoking opium, excepting those imported by the Government;
2. Counterfeit, altered, or imitation coins, paper money, bank-notes and negotiable papers;
3. Books, pictures, carvings, and other articles injurious to public security or morals;
4. Articles which infringe rights in patents, utility models, designs and trade-marks, and copyrights.

Customs Tariff (Extract)

Showing only important articles subject to import duties under the import tariff law amended in 1926 and the general duty levied upon each article. The items marked with asterisks are subject to the 100 per cent. ad valorem duty or "Luxury Tariff" in the place of the general or statutory tariff in accordance with Law No. 24 promulgated July 31, '24, which still remains in force.

Group I. Plants and Animals (living)

Articles	General Tariff	
	Unit	Rate of Duty
Saccharifying fungi, known as "Koji"...	ad val.	20%
Horses	"	5%
Bulls, oxen and cows.....	"	10%
Swines	"	20%
Poultry		free

Group II. Grains, Flours, Starches & Seeds

Articles	General Tariff	
	Unit	Rate of Duty
Rice & paddy.....	100 kin	¥1.00
Barley	"	0.60
Wheat	"	1.50
Buckwheat	"	0.50
Soja beans	"	0.70
Red or white beans, small (<i>Phaseolus</i> <i>subtrilobata</i>)	"	0.55
Peas	"	0.65
Wheat flour	"	2.90
Oatmeal	"	9.55
Corn Starch	"	2.30
Sesame seed	"	0.50
Rape-seed & mustard-seed.....	"	0.85
Paulownia seed	ad val.	10%
Seeds of clover & other pasture grasses		free

Group III. Beverages, Comestibles & Tobacco

*Vegetables, fruits & nuts.....	100 kin	¥12.70-1.95
Cocoa nuts	"	2.10
*Black tea	"	22.60
Coffee	"	25.10-15.10
*Cocoa (not sugared)	"	43.00- 6.00
Sugar	"	5.30- 2.50
Rock candy sugar, cube sugar, loaf sugar, and similar sugar.....	"	7.40
*Confectioneries & cakes.....	"	32.00
Meats, poultry, game (preserved in tin, bottle or jar).....	ad val.	25%
Fish, shell-fish and mollusca (preserved in tin, bottle or jar).....	{ 100 kin ad val.	{ 28.20 20%
Butter	100 kin	36.90
Condensed milk	"	13.40-8.30
Eggs, fresh	"	6.00
Egg-albumen & egg-powder.....	{ 100 kin ad val.	{ 5.65-3.55 10%
*Saké, & Chinese liquors, fermented....	100 litres	28.10-24.20
*Beer, ale, porter & stout.....	"	16.40
Wines, including port, sherry, ver- mouth, madeira, marsala, St. Raphael, etc.	"	81.90-26.70
Champagne & other sparkling wines..	"	170.00
Cigars, cigarettes & cut tobacco.....	ad val.	355%

Group IV. Skins, Hairs, Bones, Horns, Teeth, Tusks,
Shells. & Manufactures thereof

Sole leather	100 kin	27.10-15.20
*Leather of chamols, incl. imitation chamols leather	"	74.40
*Leather of alligators & crocodiles.....	"	207.00-113.00
Manufactures of elephant ivory.....	ad val.	50%
*Pearls	"	5%

Group V. Oils, Fats, Waxes, & Manufactures thereof

Articles	General Tariff	
	Unit	Rate of Duty
Castor oil (in can, barrel, or jar)....	100 kin	¥2.20
Cod-liver oil	ad val.	20%
Lard	100 kin	9.00
Mineral oils	{ 100 Ameri-	
	can gallons	3.45-1.70
Carnauba wax		free
*Soaps	100 kin	28.60-5.70
*Oils, fats & waxes, perfumed, & preparations of oil, fat or wax, perfumed	"	78.00
*Perfumed waters	"	90.00

Group VI. Drugs, Chemicals, Medicines, Compounds or preparations thereof, & Explosives

Chaulmoogra seeds (Hydnocarpae), cardamoms (Elettaria cardamomum white et matton), nutmegs, macis, cubebs, colocynth, colchicum seeds, tonka beans, vanilla beans, anise seeds, star-anise seeds, strophantus seeds & ajowan seeds		free
Chinese senega		"
Iris root, colombo root, seillae, jalap root & vetiver.....		"
Condurango bark, cascara sagrada, linaloe, rosewood, and sassafras wood.		"
Benzoin, asafoetida, aloe & myrrh.....		"
"Mei-jen-kiao" (Chinese bandoline for dressing women's hair).....		"
Gelatin	100 kin	16.30
Sulphur	ad val.	20%
Carbolic acid	100 kin	15.70
Gallic acid	ad val.	30%
Ammonia anhydride.....		free
Caustic soda & caustic potash.....	100 kin	12.80-1.50
Bicarbonate of soda.....	"	0.95
Nitrate of soda (Refined).....	ad val.	20%
Chlorate of soda.....	100 kin	5.80
Iodide of potash.....	"	122.00
Chloride of barium.....	"	3.35
Subgallate of bismuth.....	"	135.00
Sulphate of nickel & sulphuric nickel ammonium	"	5.35
Rhodium salts		free
Formalin	"	5.10
Urotropine.....	"	35.20
Glycerin	"	18.00
Rhongalite, brankite, dechrollin & similar reducing agents.....	"	23.70
Saccharin & similar sweet substances.	1 kin	60.00
Salol	100 kin	23.40

Articles	General Tariff	
	Unit	Rate of Duty
Benzol, toluol, xylol, solvent naphtha, anthracene, carbazol, creosote oil & other coal-tar distillates, not otherwise provided for.....		free
Pyramidon	"	161.00
Phenacetine.....	"	61.80
Salvarsan & the like.....	1 gram.	0.75
Ethylcarbonate of quinine.....	ad val.	20%
Hydrochlorate of & sulphate of morphine	1 kin	13.50
Phosphate of codein.....	"	21.40
Egonine.....	ad val.	5%
Caseine		free
*Tooth powders, tooth washes, toilet powders & other prepared perfumeries not otherwise provided for	"	50%
Gunpowder	100 kin	29.50
Dynamite	"	11.00
Projectiles, loaded with explosives.....	ad val.	30%

Group VII. Dyes, Pigments, Coatings & Filling Matters

Artificial indigo	100 kin	40.00
Sulphate of barium.....	"	0.80
Lythopone	"	2.35
Oxide of titanium.....	ad val.	10%
Vermillion or cinnabar.....	100 kin	26.80
Varnishes	"	19.40
Shoe polishes	"	13.60
Pencils	{ ad val.	25-20%
	{ 1 gross	1.45
Inks for copying or writing.....	100 kin	8.35
Inks for printing.....	{ " ad val.	111.00-3.45
		25%

Group VIII. Yarns, Threads, Twines, Cordages, & Materials thereof

Cotton yarns	100 kin	41.20-5.80
Hemp yarns	ad val.	10%
Woolen or worsted yarns.....	100 kin	33.10-22.50
Floss silk & peignee.....		free
Silk threads	ad val.	30%
Artificial silk	100 kin	125.00

Group IX. Tissues & Manufactures thereof

Tissue of cotton.....	{ 100 kin	83.10-11.00
	{ ad val.	20%
*Tissues of flax, China grass, ramie, hemp, or jute, pure or mixed with one another, incl. those mixed with cotton	{ 100 kin	80.00-2.50
	{ ad val.	20-10%

Articles	General Tariff	
	Unit	Rate of Duty
*Tissues of wool, & mixed tissues of wool & cotton, of wool & silk, or of wool, cotton & silk.....	{ 100 kin ad val.	188.00-32.60 40%
*Silk tissues, & silk mixed tissues....	{ 100 kin ad val.	520.00-90.00 15%
*Stockinet & similar knitted tissues, raised or not.....	{ 100 kin ad val.	133.00-55.70 45%
Felts	{ 100 kin ad val.	90.50 25%
Bookbinders' cloth	100 kin	34.00
Artists' canvas	ad val.	25%
*Waterproof tissues coated or inserted with India-rubber	{ 100 kin ad val.	58.20 40%
*Elastic webbing & elastic cords, elastic braids or the like.....	{ 100 kin ad val.	148.00-118.00 40-25%
*Handkerchiefs, single	{ 100 doz. ad val.	83.70-48.70 50-25%
Blankets, single	100 kin	49.20
*Travelling rugs, single.....	100 kin	232.00-139.00
*Carpets & carpetings.....	{ 100 kin ad val.	44.50-17.10 30-25%
*Table cloths, single.....	{ 100 kin ad val.	192.00-80.00 50-35%
*Curtains & window blinds.....	{ 100 kin ad val.	39.50 50-35%
Mosquito nets	ad val.	35%

Group X. Clothing & Accessories thereof

*Rain coats, wholly or partly of silk....	ad val.	50%
Rain coats, others.....	100 kin	312.00
*Shirts, fronts, collars, & cuffs.....	"	134.00
*Undershirts & drawers.....	{ 100 kin ad val.	166.00 50-25%
*Gloves	{ 100 kin ad val.	949.00-179.00 40-25%
*Shawls, comforters & mufflers.....	{ 100 kin ad val.	853.00-159.00 50-40%
*Hats & hat bodies, caps, bonnets & hoods	ad val.	50%
*Silk hats & opera hats.....	1 doz.	28.80
Felt hats	{ 1 doz. ad val.	15.80-0.95 20%
*Hats of straw or wood shaving, pure or mixed with one another.....	1 doz.	6.25
*Hats of panama straw or similar vegetable fibres	"	35.60
Helmet hats	"	20.90

Articles	General Tariff	
	Unit	Rate of Duty
*Boots, shoes, slippers, sandals, clogs, & the like	100 kin	135.00-57.89
	ad val.	50-35%
Buttons for cuffs or shirts excluding those made of precious metals, precious stones, etc.....	100 kin	137.00-54.50
	ad val.	35%

Group XI. Pulp for Paper Making, Papers, Paper Manufactures, Books & Pictures

Pulp for paper making.....	100 kin	¥0.27-0.23
Printing paper	"	6.60-1.00
Writing paper	"	4.55
Drawing paper	"	7.50
Blotting paper	"	4.90
Pasteboard or cardboard.....	"	1.75
Glass paper for window pane.....	"	107.00
Note paper in box.....	"	30.30
Envelopes in box includ. those accompanying note paper	"	31.60
Blank books	"	53.60-19.70
*Albums	ad val.	48.90-15.30
		50-40%
Baryta paper, albuminized paper & sensitized paper for photograph...	100 kin	134.00-8.55
	ad val.	40%
Wall board	ad val.	30%
*Playing cards	100 kin	113.00
*Picture post-cards	"	52.40

Group XII. Minerals & Manufactures thereof

*Precious stones	ad val.	5%
*Semi-precious stones, & manufactures thereof, not otherwise provided for ..	"	50-5%
Cement manufactures	"	35-30%

Group XIII. Potteries, Glass & Glass Manufactures

Bricks excluding cement bricks.....	100 kin	0.45
	ad val.	20-15%
Alundum tiles & the like.....	ad val.	20%
Glass rods & glass tubes.....	100 kin	18.00
	ad val.	15%
Plate or sheet glass.....	100 sq. metres	220.00-11.80
	ad val.	20%
Plate glass having inlaid metal wire or net	100 sq. metres	55.20
Spectacle glass, cast or cut.....	ad val.	30%
Dry plates for photographs, undeveloped ..	100 kin	33.00

Articles	General Tariff	
	Unit	Rate of Duty
*Spectacles & eye-glasses, looking glasses or mirrors.....	ad val.	50-35%

Group XIV. Ores & Metals

Gold & silver, tubes & wires.....	ad val.	20%
Gold & silver foils.....	"	25%
Pig iron	100 kin	0.10
Iron, bars or rods, including those having such a shape as T, angle, etc.	"	1.10
Wire rods, in coll.....	ad val.	18%
Tinned iron sheets & steel sheets.....	100 kin	0.70
Iron wire	ad val.	18%
Iron pipes & tubes.....	{ 100 kin ad val.	1.00 20-15%
Special steel	ad val.	18%
Aluminium.....	{ 100 kin ad val.	18.50-3.20 20-5%
Copper.....	{ 100 kin ad val.	21.20-7.00 30%
Lead, ingots & slabs.....	100 kin	0.40
Tin, ingots & slabs.....	100 kin	3.75
Zinc, ingots, slabs & grains.....	100 kin	3.00
Brass & bronze, ingots & slabs.....	100 kin	7.00

Group XV. Metal Manufactures

Iron nails	100 kin	3.80-2.40
Iron rivets	"	3.65
Wood screws (of brass or bronze)....	"	31.80
Bearing balls	"	20.00
Metal nets & nettings.....	{ 100 kin ad val.	74.90-5.85 25%
Materials for railway construction....	{ 100 kin ad val.	2.15 25%
Posts & other materials for suspending electric lines	{ 100 kin ad val.	29.20-12.40 18%
Materials for construction of buildings, bridges, vessels, docks, etc., not otherwise provided for.....	{ 100 kin ad val.	3.60 25%
Metal boards or plates for ceiling, walls, etc. (enamelled, or coated with paints, varnish, lacquer, etc.).....	ad val.	30%
*Chains for watches, spectacles, eye-glasses or other personal adornments {	1 kin ad val.	18.00 50%
Platinum crucibles or dishes.....	1 kin	208.00
Mechanics' tools, agricultural implements & parts thereof.....	{ 100 kin ad val.	44.30-4.65 20%

Articles	General Tariff	
	Unit	Rate of Duty
*Cutlery	100 pieces	47.40-15.10
	ad val.	50-35%
*Table forks & spoons.....	100 kin	168.00
	100 pieces	12.90
	ad val.	50%
Electric stoves, electric smoothing irons & similar electric heaters.....	ad val.	35%
Safes & cash boxes.....	"	35%
Manufactures of copper, brass or bronze, not otherwise provided for {	100 kin	127.00
	ad val.	35%
Iron manufactures, not otherwise pro- vided for	100 kin	45.10-7.80
	ad val.	35%

**Group XVI. Clocks, Watches, Scientific Instruments, Fire
Arms, Vehicles, Vessels & Machinery**

*Watches	1 pieces	15.90-1.05
*Standing or hanging clocks.....	ad val.	40%
*Binoculars & monoculars.....	1 kin	15.00-3.00
Telescopes	1 kin	3.10
	ad val.	20%
Microscopes & parts thereof.....	ad val.	20%
Balances, with weight or not.....	ad val.	20-15%
Thermometers	1 kin	6.60-2.30
	ad val.	20%
Barometers	100 kin	107.00
	ad val.	20%
Magic lanterns, cinematographs or kinetoscopes & parts thereof.....	ad val.	40%
*Phonographs, gramophones & other talking machines	"	50%
	100 kin	69.90-57.40
Musical instruments	100 pieces	25.00
	ad val.	40%
Automobiles	ad val.	50%
Cycles	1 piece	93.60-25.80
Vessels (not exceeding 20 years of ship's age)	1 gross ton	15.00
Vessels (others)	1 gross ton	20.00
	ad val.	15%
Steam boilers	100 kin	8.00-5.00
Locomotives & tenders, running on rails {	100 kin	15.90-12.00
	ad val.	20%
Steam turbines	ad val.	20%
Steam engines	100 kin	23.10-8.20
	ad val.	15%
Gas engines and petroleum engines....	100 kin	30.00-13.70
	ad val.	20%
Dynamos, electric motors, rotary con- verters, frequency changers, rotary		

Articles	General Tariff	
	Unit	Rate of Duty
phase converters & armatures.....	100 kin	42.40-15.80
Transformers	"	26.00-7.00
Sewing machines	"	16.30-11.10
Weaving looms	{ 100 kin ad val.	5.85 15%
Spinning machines, preparatory machines for spinning or weaving, & yarn finishing or twisting machines	100 kin	6.90
Knitting machines	"	43.80-25.60
Printing machines	{ 100 kin ad val.	16.50 20%

Group XVII. Miscellaneous Articles

*"Kwarin," "tagayasan" (Baryxylum rufum, Lour), "Tsuge" or boxwood, red or rose wood, red sandal wood & ebony wood	100 kin	0.50
Kasavarit.....	"	0.60
Mahogany	ad val.	5%
Oak	"	5%
Packing shooks of wood.....	ad val.	25-15%
Fire-wood		free
Charcoal	{ 100 kin ad val.	0.55 20%
Straw plaits	{ 100 kin ad val.	21.70-10.90 30-25%
*Umbrellas & parasols, umbrella sticks, walking sticks, whips & their handles	{ 100 pieces ad val.	12.20 50-35%
Celluloid & manufactures thereof.....	{ 100 kin ad val.	355.00-56.00 35%
*Films for photograph (Sensitized)....	1 kin	1.00
*Films for photograph (Developed)....	"	8.25
*Articles for billiards, tennis, cricket, chess & other games, & accessories thereof	ad val.	50-25%
*Toys	"	50%

Import Duties in Chosen

The same import tariff as in Japan proper was put into operation in Chosen (Korea) on August 29, '20, with the exception of the undermentioned articles:—

Articles	Unit	Rate of Duty
Horses (living)		free
Salt:		
Obtained by spontaneous evaporation (unground)	100 kin	¥0.10
Other	ad val.	30%
Mineral oils coming under A, 2, No. 112, Import Tariff annexed to the Customs Tariff Law:		

Exceeding 0.730 but not exceeding 0.875	{ 10 American gallons	0.19
Cokes		free
Wood coming under a. & b., F-2, 1, and a, J, No. 612, Import Tariff annexed to the Customs Tariff Law.....		"

Conventional Tariff

Besides the Custom Tariff there are at present special conventional arrangements with France and Italy, other treaty countries being also entitled to the benefit of these special tariffs under the most-favored nation treatment. Such countries are as follows:—

Argentina, Austria, Belgium including Belgian Congo, Bolivia, Brazil, Bulgaria, Chile, Colombia, Denmark, Ecuador, France incl. Algeria and other territories, Germany, Greece, Italy, Latvia, Mexico, Netherlands incl. colonies, New Zealand, Norway, Paraguay, Peru, Poland, Siam, Serbs, Croats and Slovans, Spain incl. the Balearic and Canary Islands, Sweden, Switzerland, Union of Soviet Socialist Republics, Turkey, United Kingdom of Great Britain and Ireland incl. colonies and protectorates, United States of America incl. territories.

Tarif Conventionnel Entre le Japon et la France

Marchandises	Unités	Proportion pour cent du tarif national japonais d'après laquelle sont calculés des droits applicables aux marchandises françaises	Droits applicables aux marchandises françaises, calculés d'après la proportion ci-contre
2. A.			
Sardines à l'huile.....	100 kin	50.0%	¥14.10
Beurre naturel	"	91.2%	27.00
Vins non mousseux de toutes sortes provenant exclusivement de la fermentation naturelle du raisin, ne contenant pas plus de 14 p. 100 en volume d'alcool pur ayant une densité de 0.7947 à 15° C:			
A. En bouteilles	100 litres	37.5%	30.71
B. En fûts ou barriques, ne contenant pas plus de 1 gramme de sucre calculé comme sucre de raisin dans 100 centimètres cubes à 15° C.....	"	33.3%	8.89
Vermouts contenant plus de 14 p. 100 et ne contenant pas plus de 24 p. 100 en volume d'alcool pur ayant une densité de 0.7947 à 15° C.:			
A. En bouteilles	100 litres	50.0%	40.95
B. En fûts ou barriques.....	100 litres	33.3%	13.88

Marchandises	Unités	Proportion pour cent du tarif national japonais d'après laquelle sont calculés des droits applicables aux marchandises françaises	Droits applicables aux marchandises françaises, calculés d'après la proportion ci-contre
Note:—Les vermouths contenant plus de 20 grammes de sucre calculé comme sucre de raisin dans 100 centimètres cubes à 15° C., sont assujettis à un droit additionnel de 25 "sen" par 100 litres pour chaque gramme en plus du sucre.			
Champagne et autres vins mousseux	"	37.5%	63.75
Huile d'olive:			
2. Autre qu'en récipients de fer-blanc ou barils (y compris les récipients)	100 kin	63.2%	9.22
Savons:			
1. Parfumés (y compris l'emballage intérieur)	100 kin	62.9%	18.00
2. Autres	100 kin	50.9%	2.90
Huiles, graisses et cires, parfumées, ainsi que préparations d'huiles, de graisses ou de cires, parfumées (y compris les récipients et l'emballage intérieur) ..	"	44.9%	35.00
Eaux de senteur:			
1. Vinaigres parfumés (y compris les récipients et l'emballage intérieur)	"	33.3%	30.00
2. Autres (y compris les récipients et l'emballage intérieur) ..	"	55.6%	50.00
Poudres à dents, dentifrices, poudres de toilette et autres parfumeries préparées non autrement dénommées	ad val.	50.0%	25%
Fils de laine cardée ou peignée:			
1. Ni teints, ni imprimés:			
C. Autres qu'obtenus par la torsion de fils de laine cardée et de fils de laine peignée, ou par la torsion de fils de différents numéros et autres que les fils dits "loop yarns":			
C-1. De laine peignée:			
a) Ne dépassant pas le N° 32 métrique	"	100.0%	27.70
b) Autres	"	75.4%	24.42
Tissus de laine et tissus mélangés de laine et de coton, de laine et soie ou de laine, coton et soie:			
2. Autres que velours, peluches et autres tissus pelucheux, avec poil coupé ou non:			

A. De laine:			
a) Ne pesant pas plus de 100 grammes par mètre carré..			
100 kin	75.0%		43.10
Jumelles et lorgnettes:			
1. Avec prismes	1 kin	66.7%	10.00
2. Autres	"	83.3%	{ 2.50
			{ 4.41
Automobiles	ad val.	70.0%	35%
Parties d'automobiles à l'exception des machines motrices.....			
"		83.3%	25%
Machines à tricoter:			
2. Ne pesant pas plus de 500 kilogr. pièce.....			
100 kin	50.0%		21.90

Tarif Conventionnel Entre le Japon et L'Italie

Marchandises	Unités	Droits
2-A-1) Légumes conservés en boîtes de fer-blanc, y compris la conserve de tomates..	100 kin	¥6.00
ex-2-B-1) Fruits conservés en boîtes de fer-blanc	"	5.50
ex-2-B-4-a) Citrons	"	2.50
Macaroni, vermicelle et autres pâtes similaires	"	6.00
Vermout et marsala contenant plus de 14% et ne contenant pas plus de 24% en volume d'alcool pur ayant une densité de 0.7947 à 15° C.:		
A) En bouteilles	100 litres	20.00
B) En fûts ou barriques.....	"	10.00
Note:—Les vermouth et marsala contenant plus de 20 grammes de sucre calculé comme sucre de raisin dans 100 centimètres cubes à 15° C. sont assujettis à un droit additionnel de 25 "sen" par 100 litres pour chaque gramme en plus de sucre.		
ex-2-A-a) Vins non mousseux de toutes sortes provenant exclusivement de la fermentation naturelle du raisin ne contenant pas plus de 14% en volume d'alcool pur ayant une densité de 0.7947 à 15° C.:		
En fût ou barriques, ne contenant pas plus de 1 gramme de sucre calculé comme sucre de raisin dans 100 centimètres cubes à 15° C.....		
	100 litres	5.00
ex-1) Huiles volatiles des fruits du genre "citrus" (essences d'orange, de citron, de bergamote, de mandarine, etc.).....		exemptes
1) Huile d'olive en récipients de fer-blanc ou barils	100 kin	¥1.70
ex-9-C-3) Tissus de coton pour parapluies et satins, non-façonnés, teints:		

Pesant plus de 10 kg. et pas plus de 20 kg.
par 100 mètres carrés et ayant en chaîne
et en trame dans un carré de 5 mm. de
côte:

De 28 à 35 fils.....	100 kin	18.30
De 36 à 43 fils.....	"	22.00
2-B-1) Chapeaux en feutre.....	la douzaine	5.60
2-B-2-a) Cloches de chapeaux en feutre, formées	"	5.60
2-D) Boutons en ivoire végétal.....	100 kin	70.00
2-E) Boutons en os ou corne.....	"	70.00
Mercure		exemptes

The "Luxury" Tariff

The uniform ad valorem duty of 100 per cent. popularly known as "Luxury" Tariff, passed in the 49th session of the Diet (1924) and in force since July 31, the same year, was created with a view to checking the growth of luxurious habit and the importation of articles calculated as aiding the growth of luxurious habit. The measure was originally intended for a temporary legislation and to remain in force pending a thorough revision of the import tariff, but in view of still uneven balance between exports and imports it is to remain in force for the time being. At first, 123 articles were covered under the measure, but the number was reduced to 119 by the revision made to the law in the 50th session of the Diet, the articles specified in the law being subject to an ad valorem duty at the uniform rate of 100 percent instead of the specific duty provided for each article in the statutory tariff schedule, the imposition of the "Luxury" tariff virtually meaning an increase of 3 to 5 times the statutory tariff for those goods placed under the system. A comparison of the statutory tariff and "Luxury Tariff" and the ratio of increase only for principal items is given hereunder:—

Articles	Statutory tariff per cent.	Luxury tariff per cent.	Ratio of increase per cent.
Maté & other tea substitutes.....	45	100	220
Fur manufactures	50	100	200
Leather manufactures not otherwise provided for; also those combined with precious metals, metals coated with precious metals, precious stones, semi-precious stones, pearls, coral, ivory or tortoise shell:			
(A)	50	100	200
(B)	40	100	250
Feathers & downs			
1. For ornament	40	100	250
2. Others	20	100	500
Manufactures of feathers or birds' skins with feathers not otherwise provided for	50	100	200
Manufactures of tusk not otherwise provided for	50	100	200
Manufactures of tortoise shell not otherwise provided for.....	50	100	200
Corals	40	100	250

Articles	Statutory tariff per cent.	Luxury tariff per cent.	Ratio of increase per cent.
Manufactures of coral not otherwise provided for	50	100	200
Pearls	5	100	2,000
Manufactures of skin, hair, bone, horn, teeth, tusk, shell, etc. except hide powder for chemical experimental use, not otherwise provided for.....	40	100	250
Volatile oils, vegetable, aromatic.....	—	100	—
Sandal wood	—	100	—
Vanillin, coumarin, heliotropin and similar aromatic chemicals not otherwise provided for	10	100	1,000
Tooth powders, tooth washes, toilet powders, and other prepared toilet articles not otherwise provided for.....	50	100	200
Joss sticks	40	100	250
Artificial perfumes	20	100	500
Yarns, not otherwise provided for, partly of silk, artificial silk, or metal.....	30	100	330
Stockinet and similar knitted fabrics, napped or not, wholly or partly of silk	45	100	220
Lace and netted fabrics,			
1. Curtain materials & other.....	30	100	330
2. Mosquito nettings & other.....	30	100	330
3. Veilings & other.....	30	100	330
4. Others, wholly or partly of silk....	45	100	220
Embroidered fabrics	40	100	250
Waterproof fabrics, coated with or inserted with layers of india rubber, wholly or partly of silk.....	40	100	250
Elastic webbings and cords, braids or the like,			
1. Woven, partly of silk.....	40	100	250
2. Woven, others	40	100	250
Handkerchiefs, single, wholly or partly of silk	50	100	200
Curtains and window shades,			
1. Wholly or partly of silk, combined with metal threads or embroidered	50	100	200
2. Others	35	100	350
Trimmings	30-50	100	200-330
Bed quilts and cushions, wholly or partly of silk	50	100	200
Manufactures of fabrics not otherwise provided for, wholly or partly of silk, or combined with precious metals, metals coated with precious metals, precious stones, semi-precious stones, pearls, coral, ivory or tortoise shell, or embroidered	50	100	200

Amendments to Luxury Tariff

By the amendment effected to the "luxury" tariff law in the 50th session of the Diet, the following have been added to the law:

"As shall be determined by order, a part of import duties under this law may be waived in respect of uncut or unpolished precious stones or semi-precious stones, or unworked amber, for use in the manufacture of articles used in machinery or manufacturing industries. In case of waiving import duties in accordance with the provisions of the preceding clause, the deposit at the time of import of security equivalent to the duty to be waived may be required."

The forementioned amendments took effect on March 31, '25, and at the same time the amount of the duty to be waived in accordance with the given provisions has been fixed by Imperial ordinance as follows:

Precious stones:	95 per cent. of the import duty thereon
Semi-precious stones:	80 per cent. of the import duty thereon
Amber:	80 per cent. of the import duty thereon

Preferential Tariff for Kwantung Products

In July, '25, a law was gazetted for removing import duties on some of the staples produced in the leased territory of Kwantung. The exemption list which was revised in April '27 is as follows:

Fresh fruits; Sheep and Goat skins, enamelled skins excepted; Extract of Liquorice; Glue; Gelatine; Bromine; Soda Ash; Sulphate of Soda (refined); Sulphate of magnesium; Antiseptics derived from Coal-tar; Twines and Threads of China grass; Jute yarns, twines and threads; Woollen or worsted yarn; Wool and Cotton yarn; Wild silk threads; Twines and Ropes of China grass; Tissues of Jute produced in Kwantung territory; Woollen fabrics and Woollen-cotton fabrics produced in Kwantung territory, excluding velvet, plush and pile; Oil cloth produced in Kwantung territory; Portland cement; Minerals & manufactures thereof, not otherwise provided for; Fire-proof bricks; Fire-proof clay manufactures, not otherwise provided for; Glass in lump; Glass powder; Sheet glass; Special steel; Anti-electricity materials containing nickel and chromium produced in Kwantung territory; Animal charcoal (that passing through a sieve of meshes 1.25 millimetres in diameter excepted).

Hardened bean oil is subject to a duty of ¥1.20 and Tissues (not otherwise provided for) ¥2.85 per 100 kin since April '27.

Export Guilds Laws Enforced in Sept. 1925

The enactment is dual, that is the establishment of exporters guilds and staple exports manufactures guilds. Both are to be juridical persons. The former are to attend to the exploitation and development of markets abroad for the merchandise handled by the members, their sale, selection, inspection, etc. The function of the latter chiefly consists in inspecting the goods manufactured by the members, controlling the process of manufacture, touching up manufactured goods, supplying raw materials and finding markets for the manufactured goods. One thing that is of special importance is that the two Guilds are allowed certain credit facilities by the Government.

Staple export goods coming under the law are as follows:

Cotton textile fabrics (including cotton mixed goods); Silk textile fabrics (including silk mixed goods); Woollen fabrics (including woollen mixed goods); Manufactures of cloth; Stockinet and manufactures thereof; Clocks and Watches; Metal manufactures; Porcelain and Earthenware; Enamelled iron ware; Glass manufactures; Celluloid manufactures; Matches; Rubber manufactures; Lacquer wares; Toys; Braid and Plaits; Tsurihimo; Brushes; Caps, hats and other headgears; Pencils; Artificial pearls; Fancy mattings and wild grass mattings.

Anglo-Japanese Commercial Relations

Supplementary Pact to the Treaty.—The Anglo-Japanese Treaty of Commerce, concluded in April, 1911, was to expire on July 16, '23, but remains in force pending the conclusion of a new pact to replace it. Meanwhile a supplementary agreement to the treaty in force was concluded recently between the two governments, it taking effect on the exchange of ratification on August 3, '27.

Abrogation of Conventional Tariff.—The Conventional tariff arranged between Japan and Great Britain was abrogated in March '25 and as the result thereof, all specified merchandise imported from Great Britain and the British colonies to Japan are now subject to the statutory tariff and taxed about three times the amount of the former conventional rate. Some of the Japanese exports formerly admitted free to Britain and the British colonies are also affected by the change, these consisting of silk (gray), habutai, copper (ingots and slabs), and 8 other articles. To mitigate the undesirable effect arising from the sudden change in the customs duty, namely, the imposition of heavy tariff on the imports from Great Britain and the British colonies, the Japanese Government provided a special tariff for iron plates and sheets imported to this country from Britain and her colonies as a provisional measure after the termination of the former conventional tariff. The rates specified in the temporary arrangement was adopted in the new tariff revised in 1926 and made permanent duties applicable to similar imports from all foreign countries.

MOVEMENT OF FOREIGN TRADE

Movement of Important Items (in ¥1,000)

Exports:	1925 (1st half)	1927	1926
1. Semi-finished provision	19,811	54,165	49,170
2. Manufactured provision	53,060	91,397	98,125
3. Raw material	40,511	137,324	140,250
4. Finished raw material.....	376,893	852,183	881,863
5. Finished goods	403,251	831,221	852,118
6. Miscellaneous	16,485	26,012	23,201
7. Total	910,011	1,992,302	2,044,721

FOREIGN TRADE

627

Imports:	1928 (1st half)	1927	1926
1. Semi-finished provision	125,824	222,727	243,221
2. Manufactured provision	174,106	100,813	107,059
3. Raw material	647,079	1,201,982	1,341,918
4. Finished raw material.....	192,031	348,160	357,181
5. Finished goods	158,042	290,365	314,990
6. Miscellaneous	6,859	14,996	13,115
7. Total	1,178,117	2,179,043	2,377,476

Trade between Japan Proper and Colonies

The trade of Japan with Formosa and Chosen shows this record (in ¥1,000) for the last two years, "Japan" here including Karafuto.

		Formosa			Chosen	
	*1928	1927	1926	*1928	1927	1926
Exports	83,051	202,098	202,109	169,452	330,791	338,175
Imports	30,065	121,108	121,405	138,902	269,474	248,156
Total	113,116	323,186	323,514	308,354	600,265	586,331

* For 1st half.

Exports and Imports of Commodities (¥1,000)

	Exports			Imports		
	*1928	1927	1926	*1928	1927	1926
Home						
origin	910,012	1,914,137	1,976,006	1,178,118	2,387	3,548
Foreign						
origin	33,293	78,180	68,722	1,312	2,176,772	2,373,937
Total ...	943,305	1,992,317	2,044,728	1,179,430	2,179,154	2,377,484

	*1928	1927	1926
Grand total of exports & imports..	2,122,734	4,171,345	4,422,211
Excess of imports over exports....	236,125	186,741	332,757
Excess of exports over imports....	—	—	—

* Figures for 1st half.

Exports & Imports of Specie & Bullion (¥1,000)

	Exports		Imports	
	*1928	1927	*1928	1927
Gold	—	36,108	267	1
Silver	1,632	13,575	27	7,457
Total	1,632	49,683	294	7,458

* Figures for 1st half.

	*1928	1927	1926
Grand total of exports & imports...	1,926	57,141	37,525
Excess of exports over imports.....	1,338	42,225	34,269
Excess of imports over exports.....	—	—	—

* Figures for 1st half.

Trade Returns at Leading Ports (¥1,000)

	Exports			Imports		
	*1928 (1st half)	1927	1926	1927	1926	*1928 (1st half)
Yokohama	386,545	749,006	760,360	574,820	639,640	330,062
Kobe	314,212	705,730	680,682	966,192	1,052,418	454,853
Osaka	203,389	363,350	418,249	264,924	280,991	161,469
Nagasaki	7,051	10,461	13,218	25,482	22,548	11,967
Moji	22,981	36,873	35,653	82,466	94,695	43,121
Hakodate	1,538	6,612	6,821	7,813	4,707	5,373
Niigata	4	30	51	8,671	6,919	7,796
Shimizu	3,403	12,412	14,399	17,423	20,986	905
Taketoyo	1	80	1	12,565	14,248	12,968
Nagoya	23,212	51,892	51,842	77,389	81,478	7,863
Yokkaichi	5,907	6,211	6,575	36,931	60,191	52,429
Shimonoseki	915	1,782	2,112	984	675	21,954
Onomichi-						
Itosaki	185	321	135	4,137	5,182	3,496
Tokuyama	17	210	134	9,417	3,978	4,226
Wakamatsu	5,860	11,600	16,778	30,895	26,756	479
Hakata	87	52	86	4,938	4,606	19,103
Karatsu	1,085	2,611	2,068	953	723	2,778
Miike	4,880	9,949	12,136	4,298	4,526	261
Tsuruga	1,985	2,234	1,453	6,004	6,550	2,223
Aomori	158	1,090	151	7,396	7,094	3,951
Muroran	1,235	1,389	1,536	1,194	563	4,121
Kushiro	621	1,550	2,350	1	11	748
Nemuro	160	936	1,265	3	1	1
Otaru	7,016	15,066	15,417	8,129	7,374	4,079
Total incl.						
others	943,304	1,992,317	2,044,728	2,179,154	2,377,484	1,179,430

SUMMARY OF PRINCIPAL IMPORTS & EXPORTS

Exports (¥1,000)

	1928 (1st half)	1927	1926
Food: (a) Raw			
Rice & paddy.....	579	7,772	1,799
Beans & pease.....	5,145	10,337	10,941
Aquatic products	8,997	22,297	24,316
Starch	—	210	279
Tea	2,310	10,897	12,109
Refined sugar	21,779	28,920	34,032
Beer	2,715	4,244	2,543
Comestibles in tin & bottle.....	9,245	19,850	15,976
Raw materials:			
Waste & fluss silk.....	4,851	11,700	16,304
Coal	13,339	25,507	31,123
Wood	8,415	15,951	17,979
Worked materials:			
Vegetable fatty oil.....	3,310	10,484	11,266
Camphor	2,753	5,633	5,742
Menthol crystal	2,218	4,895	10,049
Raw silk	331,024	743,425	735,152

FOREIGN TRADE

679

	1928 (1st half)	1927	1926
Cotton yarns.....	13,622	88,794	70,717
Iron	2,465	3,395	3,636
Platts	1,923	8,462	10,447
Finished articles:			
Soup	1,285	1,603	1,787
Matches	3,693	8,153	6,895
Silk fabrics	64,841	139,615	133,060
Cotton fabrics	171,688	383,849	416,270
Woolen fabrics	1,061	2,603	3,187
Cotton blankets	1,279	3,233	3,589
Silk handkerchiefs	2,828	5,914	4,810
Mats & Mattings for floor.....	—	1,744	2,289
Hosiery goods	15,876	39,057	26,004
Hats, etc.	4,153	9,427	11,451
Buttons	4,466	9,853	8,514
Paper	12,983	19,291	19,028
Cement	3,845	7,119	4,942
Potteries	16,624	30,495	33,190
Glass & glass manufactures.....	7,523	16,660	14,308
Insulated wires	1,364	1,944	1,865
Iron manufactures	7,688	12,219	13,142
Rubber tyres	2,592	4,942	4,735
Machines & parts thereof.....	4,673	11,626	9,224
Umbrellas	1,682	2,343	3,000
Brushes	2,671	5,632	7,231
Lamps & parts thereof.....	3,966	6,858	6,616
Toys	5,546	10,515	10,863

Imports (¥1,000)

Food: (a) Raw			
Rice & paddy.....	20,678	78,978	50,055
Wheat	43,832	53,925	93,349
Beans & pease.....	39,373	52,907	61,381
Bird's eggs	3,752	9,986	11,322
(b) Manufactured			
Sugar	35,884	75,799	83,672
Salts	—	3,573	3,667
Raw materials:			
Oil materials	11,173	18,849	29,484
India-rubber	14,517	34,707	40,019
Nitrate of soda, crude	4,084	6,754	8,473
Sulphate of ammonium.....	22,920	32,750	44,961
Phosphorite	5,640	10,767	9,152
Oil cake	71,815	98,882	123,942
Cotton, raw	286,656	624,596	725,935
Flax, hemp, etc.	13,464	23,602	24,934
Wool	78,776	101,671	86,062
Coal	17,360	35,492	27,831
Ores	7,985	12,797	10,815
Wood	56,183	103,758	103,978
Starch	7,641	12,026	13,821

	1928 (1st half)	1927	1926
Worked materials:			
Leather	5,066	7,815	8,158
Skin, hide, etc.	3,894	—	—
Caustic soda & soda ash.....	7,316	12,027	7,971
Coal-tar dyes	5,365	5,477	6,560
Woolen or worsted yarns.....	15,635	43,555	32,484
Pulp for paper making.....	5,702	11,931	10,496
Iron, lump, ingots, slabs, &c.....	70,332	89,054	20,824
Iron, bars, rods, etc.....		27,761	102,326
Leads, ingots and slabs.....	7,717	15,213	18,774
Zinc, lump, slabs & grains.....	5,319	9,146	14,039
Construction materials	—	9,175	9,354
Finished articles:			
Volatile oil	3,658	17,730	18,223
Kerosene oil	14,043	9,986	11,921
Cotton fabrics	3,643	7,560	6,396
Woolen fabrics	14,322	34,672	29,263
Paper	2,617	15,322	30,362
Iron nails	—	171	361
Watches & parts.....	4,110	7,275	9,506
Automobiles & parts.....	14,230	18,391	15,722
Machines & parts.....	43,511	78,381	90,686

STAPLE ARTICLES; WHERE THEY GO OR COME FROM

Exports (in ¥1,000)

	1927	1926		1927	1926
Rice & paddy			Starch		
Asiatic Russia..	104	62	China	87	147
United States..	151	166	Great Britain..	—	—
Canada	597	772	France	—	—
Hawaii	202	513	United States..	21	19
Others	373	259	Others	107	114
Total	1,428	1,772	Total	211	279
Beans & pease			Tea		
Great Britain..	6,609	8,116	Kwantung	127	131
France	3	1	United States..	8,640	10,089
United States..	2,646	1,893	Canada	1,335	1,335
Canada	229	292	Others	794	557
Hawaii	266	288	Total	10,897	12,112
Others	644	353	Sugar, refined		
Total	10,466	10,942	China	24,619	30,314
Aquatic products			Kwantung	2,495	2,927
China	7,478	11,807	Asiatic Russia..	1,611	776
Kwantung	1,675	1,585	Others	228	15
Hongkong	6,019	4,045	Total	28,918	34,032
Straits Settlement ..	1,983	1,992	Beer		
Asiatic Russia..	9	10	China	2,039	731
United States..	759	597	Kwantung	629	421
Others	2,223	2,633	Hongkong	314	221
Total	20,146	22,669			

FOREIGN TRADE

639

	1927	1926		1927	1926
British India..	497	438	Total	15,899	17,980
Straits			Vegetable fatty oils		
Settlement ..	257	194	Kwantung	117	112
Dutch India...	429	449	Great Britain..	3,520	2,268
Asiatic Russia..	—	1	France	216	249
Others	82	87	Germany	573	549
Total	4,246	2,543	United States..	4,262	4,164
Comestibles in tin & bottle			Australia	385	296
China	570	787	Hawaii	100	97
Kwantung	762	771	Others	957	3,143
Hongkong	287	238	Total	10,128	10,984
Asiatic Russia..	40	17	Camphor		
Great Britain..	6,200	3,541	British India..	1,168	1,432
United States..	8,824	8,550	Great Britain..	407	357
Hawaii	537	418	France	221	559
Others	2,289	1,617	Germany	391	171
Total	19,509	15,938	United States..	2,274	2,441
Waste silk & floss silk			Australia	183	201
Great Britain..	291	738	Others	994	582
France	4,105	5,622	Total	5,637	5,742
Italy	1,268	2,254	Menthol crystal		
United States..	5,523	7,439	British India...	303	670
Others	643	252	Great Britain..	676	807
Total	11,830	16,305	France	414	1,300
Coal			Germany	483	432
China	14,755	20,047	United States..	2,469	6,134
Kwantung	—	6	Others	552	707
Hongkong	4,791	3,410	Total	4,898	10,049
British India..	19	50	Silk, raw		
Straits			Great Britain..	3,218	2,068
Settlement ..	2,783	3,359	France	34,618	19,453
Dutch India...	352	589	Italy	66	115
French Indo-			United States..	698,883	709,379
China	420	610	Canada	2,336	758
Asiatic Russia..	1	2	Australia	1,934	1,958
Philippine Is...	1,982	2,071	Others	1,220	322
United States..	—	214	Total	742,266	734,052
Others	332	675	Cotton yarns		
Total	25,508	31,032	China	9,205	25,706
Wood			Kwantung	867	1,190
China	3,791	4,774	Hongkong	3,648	8,092
Kwantung	1,365	1,214	British India..	20,040	28,086
Hongkong	679	150	Dutch India...	1,359	2,974
British India..	2,767	3,646	Philippine Is...	673	1,027
Straits			Others	3,003	3,641
Settlement ..	1,225	3,117	Total	38,794	70,716
Dutch India...	1,230	912	Iron		
Great Britain..	1,333	1,134	China	906	863
United States..	335	409	Kwantung	1,973	2,240
Australia	2,042	1,756	Hongkong	37	37
Others	1,103	867	British India..	3	1

	1927	1926
Straits		
Settlement ..	25	1
Asiatic Russia..	405	348
Others	108	50
Total	3,457	3,521

Plaits for hat making

Great Britain..	2,443	3,217
France	1,038	1,377
Germany	1,141	699
Italy	409	515
United States..	2,878	3,761
Australia	88	157
Others	463	602
Total	8,460	10,331

Soaps

China	605	758
Kwantung	798	862
Hongkong	66	31
British India..	31	33
Dutch India...	28	31
Others	84	82
Total	1,112	1,798

Matches

China	910	959
Kwantung	85	98
Hongkong	3,772	2,342
British India..	375	750
Straits		
Settlement ..	1,263	1,265
Dutch India...	462	583
Philippine Is..	768	667
United States..	6	40
African		
countries ...	78	14
Others	437	180
Total	8,156	6,897

Silk tissues

China	1,447	2,173
Kwantung	668	428
Hongkong	964	603
British India..	15,846	11,986
Straits		
Settlement ..	2,091	2,325
Dutch India...	2,486	2,256
Philippine Is..	2,433	1,448
Great Britain..	16,912	16,952
France	8,296	6,376
Italy	462	806
United States..	18,189	26,264
Canada	15,037	14,049
Argentina	1,601	1,523
African		
countries ...	8,664	7,026

	1927	1926
Australia	32,578	30,436
New Zealand ..	1,930	1,242
Others	10,016	7,177
Total	130,615	138,071

Cotton tissues

China	123,492	180,077
Kwantung	13,119	16,042
Hongkong	29,583	24,723
British India..	86,127	70,347
Straits		
Settlement ..	10,042	12,353
Dutch India...	49,247	44,520
Asiatic Russia..	537	730
Philippine Is..	11,342	9,580
Siam	4,088	3,311
United States..	429	600
Argentina	4,738	2,163
African		
countries ...	33,235	27,925
Australia	4,818	6,948
New Zealand..	487	678
Hawaii	252	222
Others	12,299	16,035
Total	383,837	416,255

Woollen tissues

China	323	519
Kwantung	807	515
Hongkong	36	33
British India...	1,199	1,707
Asiatic Russia..	53	18
African		
countries ...	1	1
Others	242	339
Total	2,668	3,131

Cotton blankets

China	400	902
Kwantung	48	49
Hongkong	661	514
Straits		
Settlement ..	399	447
Dutch India...	295	283
Philippine Is..	144	180
Siam	391	288
Others	887	926
Total	3,226	3,589

Silk handkerchiefs

British India...	620	343
Great Britain..	243	317
United States..	2,139	1,811
Canada	556	633
Argentina	619	490
African		
countries ...	358	182

FOREIGN TRADE

633

	1927	1926		1927	1926
Australia	74	126	Kwantung	3,743	3,669
Others	1,307	907	Hongkong	1,169	985
Total	5,915	4,810	British India..	614	253
Grass rugs			Straits		
United States..	1,508	1,972	Settlement ..	343	306
Australia	23	50	Dutch India...	85	200
Others	189	261	Asiatic Russia..	248	738
Total	1,720	2,282	Philippine Is...	298	363
Knitted goods			Great Britain..	465	385
China	1,225	1,789	United States..	1,041	856
Kwantung	980	719	Australia	23	19
Hongkong	270	179	Others	505	565
British India..	8,449	8,878	Total	19,263	18,999
Straits			Cement, Portland		
Settlement ..	619	584	China	231	803
Dutch India...	2,204	1,862	Kwantung	504	594
Philippine Is...	4,576	3,380	British India ..	264	167
Great Britain..	4,660	3,108	Dutch India...	2,541	1,657
Argentina	43	53	Philippine Is...	835	635
African			Others	2,747	1,086
countries ...	3,433	2,655	Total	7,122	4,942
Australia	211	295	Potteries		
Others	2,688	2,498	China	1,596	2,382
Total	29,057	26,009	Kwantung	1,189	1,233
Hats, caps & bonnets			Hongkong	617	303
China	1,489	2,402	British India...	2,526	2,934
Kwantung	607	673	Straits		
Hongkong	531	247	Settlement ..	937	1,744
British India..	628	477	Dutch India...	4,254	3,260
Dutch India...	531	358	Philippine Is...	851	651
Asiatic Russia..	16	16	Great Britain..	417	612
Great Britain..	1,180	1,767	France	292	585
United States..	2,553	4,311	Holland	517	499
Australia	344	246	United States..	12,244	13,948
Others	1,630	958	Canada	1,225	1,228
Total	9,409	11,455	Argentina	237	159
Buttons			African		
China	1,043	910	countries	337	178
Kwantung	289	365	Australia	272	1,111
British India ..	713	788	Others	2,280	2,353
Dutch India...	295	152	Total	30,491	33,182
Great Britain..	2,377	1,728	Glass & glass		
France	211	153	manufactures		
United States..	180	152	China	2,638	3,212
Canada	340	350	Kwantung	605	578
Argentina	752	670	Hongkong	847	430
African			British India...	3,607	3,515
countries	204	208	Straits		
Australia	362	398	Settlement ..	977	1,091
Others	3,096	2,641	Dutch India...	1,876	1,594
Total	9,852	8,516	Philippine Is...	1,019	809
Paper			Great Britain..	675	200
China	10,730	10,962	United States..	2,461	1,016
			African		
			countries	222	197

	1927	1926
Australia	771	844
Others	983	822
Total	16,631	14,308

Insulated electric wire

China	553	465
Kwantung	950	1,023
Hongkong	154	34
Dutch India...	125	100
Others	159	241
Total	1,942	1,864

Iron manufactures

China	2,427	3,046
Kwantung	2,646	3,387
Hongkong	892	498
British India..	2,232	2,352
Straits Settlement ..	739	957
Dutch India...	1,032	941
Asiatic Russia..	301	315
Philippine Is...	662	595
African countries ...	188	100
Australia	79	84
Others	859	719
Total	12,060	12,993

Rubber tyres

China	1,657	1,558
Kwantung	331	225
Straits Settlement ..	1,130	909
Dutch India...	1,600	1,953
Others	223	91
Total	4,942	4,736

**Umbrellas & parasols,
European**

China	849	1,694
British India...	142	69
Dutch India...	936	710
Others	418	528
Total	2,344	3,001

Brushes

China	245	313
Dutch India...	83	50
Great Britain..	1,064	979

	1927	1926
United States..	3,261	4,595
Canada	207	303
Australia	201	458
Others	571	535
Total	5,631	7,233

**Lamps & parts
thereof**

China	1,152	1,743
Kwantung	700	759
Hongkong	514	227
British India...	365	360
Straits Settlement ..	448	458
Dutch India...	752	507
Philippine Is...	312	135
United States..	1,765	1,667
Canada	325	287
Australia	84	163
Others	463	307
Total	6,881	6,615

Toys

China	422	737
Hongkong	240	100
British India...	998	993
Straits Settlement ..	362	380
Dutch India...	507	302
Great Britain..	1,412	1,335
United States..	3,417	3,823
Canada	237	201
Argentina	385	313
Australia	403	473
Others	2,139	2,203
Total	10,521	10,861

**Machinery & parts
thereof**

China	5,180	4,015
Kwantung	4,721	3,613
Hongkong	209	80
British India...	350	277
Dutch India...	61	44
Asiatic Russia..	386	187
Australia	45	56
Others	370	453
Total	11,324	8,726

Imports (in ¥1,000)

	1927	1926
Rice & paddy		
China	2,035	665
British India...	20,367	15,795

	1927	1926
French Indo-		
China	25,159	19,331
Siam	20,487	12,385

FOREIGN TRADE

633

	1927	1926
United States..	8,675	2,490
Others	1,582	28
Total	78,907	50,649

Wheat

China	1,828	—
Kwantung	432	—
United States..	18,366	25,293
Canada	19,273	32,834
Australia	13,982	35,103
Others	49	116
Total	53,929	99,346

Beans & pease

China	16,903	17,852
Kwantung	27,115	30,180
British India..	2,085	1,926
Asiatic Russia.	6,728	11,400
Others	79	36
Total	52,910	61,392

Sugar

China	—	2
Hongkong	264	128
Dutch India...	63,307	69,317
Philippine Is..	1,319	3,038
United States..	19	17
Cuba	10,310	10,554
Others	583	616
Total	75,804	83,672

Eggs, fresh

China	9,981	11,318
Others	1	1
Total	9,982	11,319

Salt

China	1,678	712
Kwantung	802	1,402
Germany	51	45
Spain	394	638
African countries ...	279	443
Others	329	421
Total	3,594	3,661

Oil yielding materials

China	14,404	22,184
Kwantung	2,585	6,296
British India...	960	614
Straits Settlement ..	78	209
Dutch India....	560	5
Philippine Is...	1	—
Others	267	177
Total	18,853	29,485

India-rubber & gutta-percha, crude

British India...	11,601	10,870
Straits Settlement ..	21,888	28,132
Great Britain..	153	18
Others	757	992
Total	34,399	40,010

Nitrate of soda, crude

Chili	6,720	8,471
Others	34	1
Total	6,754	8,472

Sulphate of ammonium, crude

Kwantung	314	170
British India...	67	—
Great Britain..	8,157	6,291
Germany	17,823	26,976
United States..	5,190	9,764
Australia	458	742
Others	742	1,019
Total	32,750	44,962

Phosphorite

China	—	1
United States..	3,458	2,597
African countries	2,530	2,354
Others	4,776	4,188
Total	10,764	9,150

Oil cake

China	42,534	42,982
Kwantung	52,147	75,667
British India...	2,452	3,435
Asiatic Russia.	1,767	1,003
Others	127	1,056
Total	98,979	124,144

Cotton, raw

China	49,259	45,134
British India...	202,282	327,521
Straits Settlement ..	99	98
Dutch India....	278	406
French Indo-China	908	153
United States..	343,563	317,428
African countries ...	28,108	34,471
Others	133	720
Total	624,631	725,930

	1927	1926
Flax, hemp, China grass, ramie, etc.		
China	6,869	7,771
British India...	1,895	2,582
Philippine Is...	14,559	14,077
Others	253	501
Total	23,575	24,931

Wool		
China	463	676
Kwantung	17	4
Great Britain..	4,488	9,324
African countries	813	163
Australia	94,601	74,151
Others	1,294	1,706
Total	101,677	86,024

Coal		
China	6,822	4,191
Kwantung	22,707	18,543
French-Indo-China	5,236	3,842
Others	724	986
Total	35,489	27,562

Ores		
China	5,641	5,656
Straits Settlement ...	6,088	4,321
French-Indo-China	325	105
Others	876	170
Total	12,930	10,252

Wood		
China	1,399	1,645
Kwantung	253	248
Dutch India....	744	981
Asiatic Russia..	15,007	9,567
Siam	1,553	1,478
United States..	71,289	84,709
Canada	12,136	4,123
Others	1,392	1,275
Total	103,774	104,026

Wheat bran		
China	8,704	11,154
Kwantung	3,160	2,132
Others	18	95
Total	11,881	13,382

Leather		
British India...	2,334	2,503
Straits Settlement ..	10	1
Great Britain..	755	1,162
Germany	313	199
United States..	3,083	4,199

	1927	1926
Others	174	94
Total	7,669	8,158

Caustic soda & soda-ash		
Great Britain..	7,249	4,594
United States..	2,088	2,664
African countries	2,263	677
Others	641	38
Total	13,242	7,973

Coal-tar dyes		
Great Britain..	72	39
France	249	186
Germany	3,766	5,032
Switzerland ...	621	702
United States..	766	598
Others	13	5
Total	5,486	5,485

Woollen & worsted yarns		
Great Britain..	8,421	5,781
France	9,663	6,701
Germany	13,674	14,411
Belgium	64	293
Italy	181	323
United States..	6	3
Others	11,542	4,961
Total	43,553	32,482

Pulp for paper making		
Great Britain..	505	174
Germany	665	1,033
Sweden	1,761	2,477
Norway	1,805	1,170
United States..	593	793
Canada	6,080	4,946
Others	521	425
Total	11,930	11,018

Iron (pig, ingot, bloom, billet & slab)		
China	270	187
Kwantung	8,928	7,386
British India...	11,058	9,634
Great Britain..	1,122	1,108
Germany	2,605	643
Sweden	381	253
United States..	90	15
Others	3,534	1,605
Total	27,965	20,831

Iron (bar, rod, plate, sheet, wire, tube, etc.)		
China	16	37

FOREIGN TRADE

637

	1927	1928
Great Britain..	22,141	28,387
Germany	24,630	32,656
Belgium	6,319	5,876
Sweden	1,192	1,210
United States..	31,811	30,520
Others	2,444	3,450
Total	88,554	102,136

Lead (ingot & slab)

British India..	992	3,978
Great Britain..	8	10
United States..	5,361	3,882
Canada	7,529	9,984
Australia	1,173	1,823
Others	148	86
Total	15,211	18,775

Zinc (ingot, slab, grain)

Germany	—	75
United States..	2,559	3,236
Canada	3,188	5,708
Australia	3,212	4,544
Others	378	476
Total	9,335	14,039

Construction materials

Great Britain..	699	666
Germany	3,421	3,336
Belgium	291	749
United States..	2,986	3,748
Others	1,905	1,031
Total	9,302	9,530

Petroleum benzine oil

Dutch India..	5,490	10,046
United States..	5,516	8,055
Others	1	132
Total	11,007	18,234

Illuminating oil

Dutch India..	11,265	3,980
United States..	14,865	12,191
Others	1,838	835
Total	27,968	17,005

Cotton tissues

Great Britain..	6,241	5,409
United States..	126	215
Others	870	664
Total	7,237	6,288

Woollen tissues

Great Britain..	28,208	25,979
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	1927	1928
Germany	5,235	1,921
United States..	8	8
Others	1,209	1,316
Total	34,661	29,224

Paper

Great Britain..	3,173	4,069
Germany	2,534	3,976
Holland	295	357
Sweden	5,070	7,240
Norway	1,209	1,169
United States..	1,254	1,892
Others	1,741	1,712
Total	15,277	20,416

Iron nails

Great Britain..	22	30
Germany	10	15
Belgium	5	7
United States..	92	140
Others	43	167
Total	173	359

Watches & parts thereof

Switzerland ...	6,627	8,644
United States..	563	617
Others	85	269
Total	7,275	7,530

Automobiles & parts thereof

Great Britain..	454	306
France	599	816
Germany	216	351
Italy	340	120
United States..	16,023	13,105
Others	649	1,025
Total	18,282	15,722

Machinery & parts thereof

Great Britain..	20,746	25,411
France	2,187	2,399
Germany	17,603	11,822
Belgium	50	211
Switzerland ...	4,548	4,869
Sweden	726	1,199
United States..	31,112	42,074
Others	1,640	2,485
Total	78,612	90,470

DISTRIBUTION OF TRADE

In our foreign trade Great Britain, the U.S.A., their dependencies and China occupy the foremost position, 83.3 and 64.0

percent of the total exports in 1926 and 1927 respectively going to those markets. Imports from them in 1926 and 1927 occupied 73.0 and 44.1 percent. respectively of the total imports. Japan gets her supply of raw materials such as raw cotton, jute, China grass, and other kinds of vegetable fibres, wool and other animal fibres, gum, furs and hides, metals and metal ores, etc., chiefly from those countries while the bulk of raw silk and cotton yarns and piece goods, which are the foremost items of her export trade, find their market in the U.S.A. and China respectively.

	Exports (In Yen 1,000)		Imports (In Yen 1,000)	
	*1926	1927	*1926	1927
Asia:				
China	192,874	334,183	135,582	226,034
Kwantung	49,733	91,271	94,384	132,448
Hongkong	34,493	66,529	458	1,599
British India	63,774	167,580	166,616	270,592
Straits Settlement	13,972	36,658	17,947	35,873
Dutch India	40,568	82,581	59,282	103,775
French Indo-China ...	2,579	5,873	13,566	33,180
Asiatic Russia	5,303	7,776	3,557	24,526
Philippine Islands	13,835	32,834	8,433	17,841
Siam	4,784	11,146	8,949	22,260
Total incl. others....	424,643	844,534	510,720	872,911
Europe:				
Great Britain	32,561	64,930	77,121	153,272
France	23,511	54,045	13,009	27,310
Germany	5,573	10,612	69,575	131,391
Belgium	799	2,206	7,224	14,319
Italy	2,029	3,866	2,705	6,327
Switzerland	449	1,416	10,059	18,096
Holland	2,837	3,387	2,307	3,981
Sweden	313	497	5,533	10,889
Spain	415	837	699	1,343
Denmark	596	1,388	1,386	845
Turkey	1,657	2,948	184	302
Total incl. others....	199,550	147,892	199,550	387,740
North America:				
United States	378,720	833,804	307,578	673,686
Canada	12,815	27,402	37,626	55,670
Mexico	668	1,266	2	19
Total incl. others....	394,212	866,749	346,280	739,973
South America:				
Peru	763	1,223	217	169
Chili	757	2,064	4,332	7,868
Argentina	3,334	9,529	3,393	2,003
Brazil	821	1,251	101	294
Total incl. others....	10,085	20,886	8,074	10,478
Africa:				
Egypt	11,029	29,006	11,922	24,634
Cape Town & Natal...	5,085	11,640	619	1,082
Total incl. others....	20,551	51,235	17,179	36,402
Other States:				
Australia	17,294	50,566	88,827	122,840
New Zealand	1,349	3,347	458	420
Hawaii	3,593	6,894	70	104

	Exports (in Yen 1,000)		Imports (in Yen 1,000)	
	*1926	1927	*1926	1927
Total incl. others....	22,452	61,022	92,140	127,225
Grand total	943,304	1,992,317	1,179,430	2,179,154

* Figures for 1st half.

PRINCIPAL EXPORTS AND IMPORTS BY COUNTRIES

Classified according to countries the volume of principal exports and imports for 1926 and 1927 was as follows:—

Exports (in ¥1,000)

ASIA

	1927	1926		1927	1926
China:			Silk tissues....	2,091	2,325
Aquatic			Cotton tissues..	10,042	12,853
products ...	7,478	11,807	Potteries	937	1,744
Sugar, refined..	24,619	30,314	Total incl.		
Coal	14,775	20,047	others	36,958	41,497
Cotton yarns ..	9,205	25,706	Dutch India:		
Paper	10,730	10,962	Cotton yarns..	1,359	2,974
Total incl.			Silk tissues....	2,486	2,256
others	334,184	421,861	Cotton tissues..	49,247	44,520
Kwantung:			Knitted goods..	2,204	1,862
Cotton yarns ..	867	1,190	Potteries	4,254	3,260
Iron	1,973	2,240	Total incl.		
Cotton tissues..	13,119	16,042	others	82,581	74,754
Paper	3,743	3,669	Asiatic Russia:		
Machinery &			Rice & paddy..	104	62
parts thereof.	4,721	3,613	Cotton tissues..	537	731
Total incl.			Paper	248	738
others	91,271	99,608	Iron	405	348
Hongkong:			Sugar, refined..	1,611	776
Aquatic			Total incl.		
products ...	6,019	4,046	others	7,776	5,300
Coal	4,791	3,410	French-Indo-China:		
Cotton yarns ..	3,648	8,092	Coal	420	610
Matches	3,772	2,342	Total incl.		
Cotton tissues..	29,583	24,723	others	5,874	6,207
Total incl.			Philippine Is.:		
others	66,529	52,973	Coal	1,982	2,071
British India:			Cotton yarns..	672	1,027
Cotton yarns..	20,040	28,086	Silk tissues....	2,433	1,448
Silk tissues....	15,846	11,986	Knitted goods..	4,576	3,380
Cotton tissues..	86,127	70,347	Glass & glass		
Knitted goods..	8,449	8,878	manufactures	1,019	809
Potteries	2,526	2,934	Total incl.		
Total incl.			others	32,843	27,821
others	167,580	155,952	Siam:		
Straits Settlement:			Cotton tissues..	4,088	3,311
Coal	2,783	3,359			
Wood	1,254	3,117			

	1927	1926		1927	1926
Cotton blankets	391	289	Grand total in-		
Total incl.			cluding other		
others	11,146	9,271	countries	844,524	903,416

EUROPE

Great Britain:

Beans & pease	6,609	8,116
Comestibles in		
tin & bottle.	6,200	3,541
Plaits for hat		
making	2,443	3,217
Silk tissues....	16,912	16,952
Knitted goods.	4,660	3,108
Buttons	2,377	1,728
Total incl.		
others	64,930	59,494

France:

Waste silk &		
floss silk	4,105	5,622
Silk, raw	34,618	19,453
Menthol crystal	414	1,300
Plaits for hat		
making	1,038	1,377
Silk tissues....	8,290	6,376
Camphor	221	559
Vegetable oil,..	216	249
Total incl.		
others	54,045	42,412

Germany:

Vegetable fatty		
oils	973	549
Camphor	391	171
Menthol crystal	483	432
Plaits for hat		
making	1,141	699
Total incl.		
others	10,612	8,131

Italy:

Waste silk &		
floss silk	1,268	2,254
Plaits for hat		
making	409	515
Silk tissues....	462	806
Total incl.		
others	3,866	5,252

Holland:

Potteries	517	499
Total incl.		
others	3,387	2,496

Grand total incl.		
other countries	147,892	129,421

NORTH AMERICA

United States:

Beans & pease	2,646	1,893
Tea	8,640	10,089
Comestibles in		
tin & bottle.	8,824	8,550
Waste silk &		
floss silk	5,523	7,439
Menthol crystal	2,469	6,134
Silk, raw	698,883	709,379
Silk tissues....	18,189	26,264
Potteries	12,244	13,948
Total incl.		

others	833,804	860,881
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Canada:

Rice & paddy..	597	772
Tea	1,335	1,335
Silk, raw	2,336	758
Silk tissues....	15,037	14,049
Potteries	1,225	1,228
Total incl.		
others	27,402	24,754

Grand total incl.		
other countries	866,749	890,103

SOUTH AMERICA

Argentina:

Silk tissues....	1,601	1,523
Cotton tissues.	4,738	2,163
Silk handker-		
chiefs	619	490
Buttons	752	670

Toys	385	313
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Total incl.		
others	9,529	6,334

Grand total incl.		
other countries	20,886	16,831

FOREIGN TRADE

341

OTHER STATES

African countries:

Silk tissues....	8,664	7,026
Cotton tissues.	33,235	27,925
Silk handker- chiefs	358	182
Knitted goods..	3,433	2,655
Potteries	337	178
Total incl.		
others	51,235	43,155

Australia:

Wood	2,042	1,756
Silk, raw	1,924	1,958
Silk tissues ..	32,578	30,436
Cotton tissues.	33,235	6,948
Potteries	337	1,111
Total incl.		
others	50,566	51,611

New Zealand:

Silk tissues....	1,930	1,242
Cotton tissues.	487	678
Total incl.		
others	3,347	2,946

Hawaii:

Rice & paddy...	202	513
Beans & pease	266	288
Comestibles in tin & bottle..	537	417
Cotton tissues.	252	222
Vegetable fatty oils	100	97
Total incl.		
others	6,894	6,700

Grand total incl.		
other countries	111,257	104,958

Imports (¥1,000)

ASIA

China:

Beans & pease	16,903	17,851
Eggs, fresh....	9,981	11,318
Oil yielding materials ...	14,404	22,184
Cotton, raw....	49,259	54,134
Oil cake	42,534	42,982
Wheat bran...	8,704	11,154
Total incl.		
others	226,034	239,410

Kwantung:

Beans & pease	27,115	30,180
Salt	862	1,402
Oil yielding materials ...	2,585	296
Oil cake	52,147	75,667
Coal	22,707	18,543
Total incl.		
others	132,448	157,034

Hongkong:

Sugar	264	128
Total incl.		
others	1,599	1,426

British India:

Rice & paddy..	20,367	15,795
India-rubber & gutta-percha, crude	11,601	10,870

Oil cake	2,452	3,435
Cotton, raw....	202,282	327,521
Flax, hemp, China grass, ramie, &c....	1,895	2,582
Iron (pig. ingot, bloom, billet & slab)	11,058	9,634
Total incl.		
others	270,592	391,136

Straits Settlement:

Oil yielding materials ...	78	209
India-rubber & gutta-percha, crude	21,888	28,132
Ores	6,088	4,321
Cotton, raw...	99	98
Total incl.		
others	35,873	39,872

Dutch India:

Sugar	63,307	59,317
Cotton, raw...	278	406
Wood	744	981
Petroleum ben- zine oil	5,490	10,046
Illuminating oil	11,262	9,828

	1927	1926		1927	1926
Total incl.			Philippine Is.:		
others	103,775	103,077	Sugar	1,319	3,038
French-Indo-China:			Flax, hemp,		
Rice & paddy..	25,159	19,331	China grass,		
Cotton, raw ...	908	153	ramie, &c....	14,559	14,077
Coal	5,236	3,842	Total incl.		
Ores	325	105	others	17,841	18,714
Total incl.			Siam:		
others	33,180	24,520	Rice & paddy..	20,087	12,385
Asiatic Russia:			Wood	1,553	1,478
Beans & pease	6,728	11,400	Total incl.		
Oil cake	1,717	1,003	others	22,260	14,358
Total incl.			Grand total incl.		
others	24,526	23,884	other countries	872,917	1,017,581

EUROPE

Great Britain:			Iron (bar, rod,		
Sulphate of am-			plate, sheet,		
monium, crude	8,157	6,291	wire, tube,		
Wool	4,488	9,324	&c.)	24,630	32,656
Caustic soda &			Construction		
soda-ash	7,248	4,594	materials	3,421	3,336
Woollen or wor-			Woollen tissues	5,235	1,921
sted yarns ...	8,921	5,781	Paper	2,534	3,976
Iron (bar, rod,			Machinery &		
plate, sheet,			parts thereof.	17,603	11,522
wire, tube,			Total incl.		
&c.)	22,141	28,387	others	131,391	145,221
Cotton tissues.	6,241	5,409	Belgium:		
Woollen tissues	28,208	25,979	Woollen or wor-		
Machinery &			sted yarns...	64	293
parts thereof.	20,746	25,411	Iron (bar, rod,		
Total incl.			plate, sheet,		
others	153,272	170,275	wire, tube,		
France:			&c.)	6,319	5,876
Coal-tar dyes..	249	186	Construction		
Woollen or wor-			materials ...	291	479
sted yarns...	9,663	6,701	Total incl.		
Automobiles &			others	14,319	14,241
parts thereof.	599	816	Italy:		
Machinery &			Woollen or wor-		
parts thereof.	2,187	2,399	sted yarns...	181	333
Total incl.			Automobiles &		
others	27,310	24,545	parts thereof.	340	120
Germany:			Total incl.		
Sulphate of am-			others	6,327	6,787
monium, crude	17,823	26,976	Switzerland:		
Woollen or wor-			Coal-tar dyes..	621	702
sted yarns...	13,674	14,411	Watches & parts		
Coal-tar dyes..	3,766	5,032			

FOREIGN TRADE

643

	1927	1926		1927	1926
thereof	6,627	8,644	&c.)	1,192	1,210
Machinery &			Paper	5,070	7,240
parts thereof.	4,548	4,869	Machinery &		
Total incl.			parts thereof.	726	1,199
others	18,096	21,819	Total incl.		
			others	10,889	13,947
Holland:			Norway:		
Paper	295	357	Pulp for paper		
Total incl.			making	1,805	1,170
others	3,981	4,726	Paper	1,209	1,169
Sweden:			Total incl.		
Pulp for paper			others	4,215	5,263
making	1,761	2,477	Spain:		
Iron (pig, ingot,			Salt	394	638
bloom, billet,			Total incl.		
& slab)	361	253	others	1,343	1,049
Iron (bar rod,			Grand total incl.		
plate, sheet,			other countries	387,740	416,304
wire, tube,					

NORTH AMERICA

United States:			Canada:		
Wheat	18,366	25,293	Wheat	19,273	32,834
Sulphate of am-			Wood	12,136	4,123
monium, crude	5,190	9,764	Pulp for paper		
Cotton, raw ...	343,563	317,428	making	6,080	4,946
Wood	71,289	84,709	Lead (ingot &		
Leather	3,083	4,199	slab)	7,529	9,984
Iron (bar, rod,			Zinc (ingot, slab,		
plate, sheet,			grain)	3,188	5,708
wire, tube,			Total incl.		
&c.)	31,811	30,520	others	55,670	65,929
Petroleum, ben-			Cuba:		
zine oil	5,516	8,055	Sugar	10,310	10,554
Illuminating oil	14,895	21,655	Total incl.		
Automobiles &			others	10,310	10,646
parts thereof.	16,023	13,105	Grand total incl.		
Machinery &			other countries	739,973	755,498
parts thereof.	31,112	42,074			
Total incl.					
others	673,686	680,186			

SOUTH AMERICA

Chili:			Total incl.		
Nitrate of soda,			others	7,868	8,690
crude	6,720	8,471	Grand total incl.		
			other countries.	10,478	11,944

OTHER STATES

African countries:			Phosphorite ..	2,530	2,364
Salt	297	443	Cotton, raw ...	28,108	34,471

	1927	1926		1927	1926
Wool	813	163	Wool	94,601	74,151
Caustic soda & soda-ash	2,263	677	Zinc (ingot, slab, grain)	3,212	4,544
Total incl. others	36,402	41,286	Total incl. others	122,822	128,396
Australia:			Grand total incl. other countries	163,627	173,459
Wheat	13,982	35,103			

CUSTOMS REVENUE

The average rate on dutiable goods stood in 1913 at 20% yielding ¥73,000,000. Since then, with marked advance of price of commodities specific tariffs have gradually fallen and in 1920 the average came to 8% yielding ¥74,000,000. The sudden increase of the revenue in 1922 to ¥117,000,000 with the average rate rising to about 13% despite trade depression is accounted for by the protective tariff on iron and dyes, raised consequent on the great slump in 1920. Again the marked increase of the revenue and consequent rise of the average rate in 1926 and later years is accounted for by the levying of luxury tariff since 1924 and the general increase of the statutory tariff rate in 1926.

Year	Total Imports Yen 1,000	Dutiable goods Yen 1,000	Customs revenue Yen 1,000	Average percentage
1922	1,890,308	888,508	117,295	13.20
1923	1,982,231	754,649	96,686	12.81
1924	2,453,402	827,780	113,904	13.76
1925	2,572,658	863,254	108,687	12.59
1926	2,377,484	937,172	147,969	15.78
1927	2,356,817	827,956	144,776	17.48
1928 (1st half)	1,179,430	445,974	78,686	17.63

JAPAN'S INVISIBLE TRADE

Though anything like exact figures of the balance of international account outside ordinary trade can hardly be obtained, the approximate estimate prepared by the responsible authorities showing the balance of receipts and payments of the invisible trade gives the figures for 1926 as ¥721,000,000 of the former and ¥542,000,000 of the latter, leaving balance of ¥179,000,000 due to this country. Figures for the last four years are as follows (in ¥1,000):—

Year	Receipts	Payments	Balance of Receipts
1923	953,000	568,000	384,000
1924	1,208,000	789,000	420,000
1925	803,000	585,000	218,000
1926	721,000	542,000	179,000

STEAM-VESSELS ENTERED FROM AND CLEARED TO FOREIGN COUNTRIES

Entered

Nationality	1927		1928 (1st half)	
	No. of ships	Tonnage 1,000 tons	No. of ships	Tonnage 1,000 tons
Japanese steamers*	13,277	32,690	6,741	17,543
Chinese	38	46	5	7
British	1,904	8,830	972	4,524
French	103	639	57	371
German	251	984	148	622
Italian	38	205	14	77
Dutch	297	1,358	142	515
Swedish	57	196	34	112
Norwegian	202	523	145	434
Russian	44	68	35	51
Danish	63	295	39	153
American	622	3,457	324	1,760
Total incl. others.....	16,899	49,294	8,657	26,302

Cleared

Nationality	1927		1928 (1st half)	
	No. of ships	Tonnage 1,000 tons	No. of ships	Tonnage 1,000 tons
Japanese steamers*	13,305	33,288	6,776	17,209
Chinese	37	47	5	7
British	1,905	8,833	970	4,541
French	103	633	58	388
German	249	974	148	613
Italian	38	205	14	77
Dutch	296	1,350	140	599
Swedish	56	191	35	115
Norwegian	197	511	142	435
Russian	43	63	35	50
Danish	61	287	41	169
American	610	3,410	315	1,671
Total incl. others.....	16,902	49,793	8,680	25,856

* Those engaged in foreign trade.

Foreign Trade Situation in 1927-8

Despite the continued disturbances in China and the extreme business depression at home, the result of foreign trade for the year 1927 made comparatively satisfactory showing on the whole. The volume of exports and imports for the period amounted to ¥2,064,805,000 and ¥2,356,817,000 respectively as against ¥2,118,830,000 and ¥2,563,426,000 for the previous year. The excess of imports for the year under review shows a decrease of ¥152,584,000 or about 45.5%, the figure being the smallest on record since 1923. The fall is attributed to the marked decrease of imports for which monetary panic and the dislocation of trade and industrial activity were responsible.

Tracing the trend of the trade situation during the period, exports remained inactive during the first three months of the year, each month recording a decrease of about ¥25 millions compared with the same period of the preceding year, due to the favorable turn of the exchange rates and the spread of Chinese disturbances. After April, however, exports gradually increased owing to the slump of the exchange rates from the monetary panic and the depreciation of prices. The excess of exports as a rule does not occur before August every year, but it set in earlier than usual, and this favorable trend continued throughout the remaining months, and excepting the months of October and November the amount of exports for each month recorded more or less gain on the similar figures of the preceding year. Turning to imports, the situation was very slack, caused by the far-reaching effect of the financial depression which seriously affected the purchasing power. Imports were at the high tide only during the months of March, April and May, when the total imports reached upwards of ¥200 millions. In June, the excess of imports over exports was only a little over ¥9,150,000 and the following month saw an excess of exports amounting to over ¥5,850,000. The average amount of imports for one month was about ¥177 millions, a decrease of over ¥20 millions below the similar figure of the preceding year, ¥197 millions.

The sending of specie to London and New York repeatedly made while the late Ministry was in power had a favorable effect on the exchange market, as the shipment was understood to lead to the possible lifting of the gold embargo. Thus the Yokohama Specie Bank's T.T. rate on New York was nearly restored to par, i.e. to the neighborhood of \$49 at the beginning of March '27. The tendency was suddenly reversed by the memorable panic about the middle of March, and this fact coupled with the discontinuation of the specie shipment by the new Ministry gradually pushed down the Yen value, and the rate on New York fell to \$46¼, the bottom figure that was registered in the middle of May.

Principal items on the export list, which increased in volume compared with the previous year, numbered 10 articles, notably raw silk and silk goods which increased about ¥12,200,000 and ¥5,900,000 respectively. Among the articles which declined notable are cotton fabrics and cotton yarns which fell off by about ¥35,000,000 and ¥30,000,000 respectively. The conspicuous increase of raw silk and silk goods accounts for the comparatively satisfactory showing of the year's trade balance, while the decline of cotton fabrics and cotton yarn, both important items on the export list, mainly going to China, eloquently testifies how the disturbances in that country vitally affected the trade interests of this country.

Of the principal imports, 11 articles increased in volume while 18 decreased. Among others the arrival of cotton (raw & ginned) decreased by about ¥140,000,000 or 20%, this marked falling-off being largely responsible for the decline of the whole volume of imports for the year. The year under review saw a large import of rice amounting to about ¥80,000,000, a gain of over ¥32,000,000 on the figure of the previous year, the increase being attributed to the less satisfactory yield of domestic rice

in the preceding year. The import of wheat, on the contrary, decreased by about ¥40,000,000, other foodstuffs including beans, eggs, sugar, etc. being also on decrease. Wool, woollen yarn, woollen cloth, pulp, motor cars and parts thereof, etc. were among those which increased.

To sum up, the favorable showing of the year's trade balance, which resulted in a marked falling-off of imports, was brought about by the increase of exports through the fall of the exchange rates and the decline of imports by the extreme economic depression which seriously affected the purchasing capacity of the masses.

The result of foreign trade for the first half of 1928 was less satisfactory than the previous year, both exports and imports falling below the previous year's figures. To be precise, exports amounted to ¥943 millions and imports ¥1,134 millions showing decrease of ¥6 millions (6.63%) and ¥67 millions (5.40%) respectively, with an adverse balance of ¥234 millions. The relative ratio of decrease between exports and imports stands at about 11 of the latter to 1 of the former, and compared with the same period of the previous year the excess of imports fell by about 20.7%. This latter fact is satisfying as a sign of improvement in the trade position of the country. In prices imported goods were generally upward while it was otherwise with exports. And in respect of quantity the decline of imports was more marked than in value, while in exports which perceptively increased in volume the fall in value was far more pronounced.

For the decrease of exports in value raw silk was chiefly responsible, it falling off approximately ¥30 millions, though in volume this staple export reached a record level. The next important export item, cotton yarns and cotton fabrics which decreased ¥8 and 6 millions respectively mainly due to the unfavorable situation in China, had a share in the unsatisfactory issue of oversea trade balance. Still, on the whole, trade with China was much better than was feared at first, both exports and imports showing increases of ¥42 and ¥35 millions over the previous year's returns. After all China has to depend upon Japan for the supply of cotton goods and other items of daily necessity, only the anti-Japanese agitation of political mongers still impedes the smooth working of tradal relations.

In the decline of imports, the decreased arrival of raw cotton by about ¥104 millions is most important, this fall being accounted for by the depressed state of spinning industry. Next to cotton, rice and paddy also dropped by about ¥42 millions on account of the favorable growth of the previous year's crop in this country. The figures (in ¥1,000 unit) for principal items are shown below:—

	Jan.—June 1928	Compared with Jan.—June, '27.
Exports:		
Raw silk	331,207	— 29,588
Silk fabrics	64,838	— 666
Cotton yarn	13,622	— 8,085
Cotton fabrics	171,683	— 6,439
Sugar	21,779	+ 6,985
Waste silk and floss silk.....	4,839	— 2,006
Porcelain & earthenware.....	16,624	+ 3,227

Marine products	8,896	+ 445
Coal	18,339	+ 1,327
Hosiery	15,943	+ 3,665
Imports:		
Rice & paddy.....	20,678	- 41,755
Wheat	43,676	+ 8,863
Beans	39,337	+ 5,116
Sugar	35,885	- 5,445
Raw cotton	286,554	-103,709
Wool	78,779	+ 21,426
Woolen yarn	15,597	- 107
Woolen cloth	3,668	+ 106
Oil cake	71,119	- 12,945
Iron	69,651	+ 2,131
Machinery	43,511	+ 1,645
Sulphate of ammonium.....	22,756	+ 4,049
Caustic soda & soda ash.....	7,285	+ 807
Raw rubber	14,501	- 1,097
Timber	55,657	+ 12,244
(+ increase, - decrease)		

CHAPTER XXXVI

SIX PREMIER CITIES

The City Planning Law

The rapid expansion of cities and towns in recent years is demanding their reconstruction, totally inadequate as they are to meet the requirements of their radically changed conditions in traffic, sanitation, etc. The city planning law was first adopted in 1919, and provides for the organization of the Central and Provincial City Planning Committees to deliberate on all important measures for preserving and promoting, in and outside the city limit, matters of public welfare and benefit.

The expenditures are met either by the Government or by the communal bodies according as one or the other conducts the works. Private individuals materially benefited by the new plans and arrangements may be made to bear the whole or part of the expenses within a certain limit. For raising the necessary fund, the municipality, with the approval of the Government, may levy upon its citizens special burdens not exceeding $12\frac{1}{2}\%$ of land tax, 40% of prefectural taxes, etc. The law came into force on Jan. 1, 1920, for the six premier cities of Tokyo, Kyoto, Osaka, Kobe, Nagoya and Yokohama, the same law being extended later to 43 smaller cities throughout the country including Sapporo, Otaru, Hakodate, Sakai, Amagasaki, Nagasaki, Niigata, Hiroshima, Okayama, Shimonoseki, etc., and is expected to do much for improving them as to street plan, sanitation, sewage systems, etc. in harmony with the City Building Law also passed by the Diet in April, 1919.

It may be noted that in Sept. '22, Dr. Charles A. Beard, a noted American expert of municipal administration, arrived in Tokyo in response to the invitation of the Tokyo Municipal Research Board presided over by the then Mayor Viscount Goto. Before he went home in March '23 he handed to the Viscount a report embodying the results of his six months' study of the important problem of Greater Tokyo. It has made a profound impression on the public.

Building Regulations.—The city building law came into operation on Dec. 1, 1920, when Rules for Operation were enforced. They specify the kind of buildings not allowable in the residential, industrial, or commercial quarters. A building in the residential quarters must not exceed as a rule 65 feet in height and in the other quarters 100 feet, though some allowance is made for those with spacious surroundings, such as a park, a road, etc.; in particular the height of a brick or stone building is not to exceed 65 feet and that for a wooden one 50 feet, etc., etc.

Area and Population

Of the six premier cities, Osaka now occupies the foremost

place as to area and population in consequence of the expansion of the municipal district effected on April 1, 1925, as preparatory step to the execution of the Greater Osaka plan mentioned elsewhere in the present chapter. The following comparative table is based on the 2nd decennary census taken on Oct. 1, 1925:

Cities	Area (Sq. kilometres)	Population	Population per 1 sq. kilometre
Osaka (New)	178.1	2,114,809	11,950
Tokyo	81.2	1,995,303	23,353
Kyoto	33.2	679,976	11,330
Yokohama	39.3	405,888	14,761
Kobe	38.4	644,212	11,842
Nagoya	152.8	768,560	4,529

For reference sake, below is given comparative statistics as to area and population of Tokyo, Osaka, London and five other large cities of the world:

	Area (Sq. kilometres)	Population	Density of population (per 1 sq. kilometre)
Greater Osaka	178.1	2,114,809	11,950
Tokyo	81.2	1,995,303	23,353
Greater London	1,794.6	7,461,168	4,158
Berlin	878.0	3,804,048	4,333
Paris	80.0	2,906,472	36,331
New York	742.8	5,620,048	7,566
Chicago	498.3	2,701,705	5,422
Washington	155.4	437,571	2,816

The comparative growth of population in the six premier cities is shown in the 2nd decennary census returns taken in October 1925, as follows:—

	No. of Households	Population			Comparison with 1920 figures
		Men	Women	Total	
Osaka (new) ..	484,072	1,126,321	988,488	2,114,809	+861,826
Tokyo	429,985	1,095,222	900,081	1,995,303	-177,898
Nagoya	164,248	392,518	376,042	768,560	+338,563
Kyoto	148,870	350,745	329,231	679,976	+ 88,653
Kobe	151,505	335,763	308,449	644,212	+ 35,568
Yokohama ...	95,377	214,341	191,547	405,888	- 17,050

(+ increase. - decrease).

MUNICIPAL FINANCES

Tax Burdens

The tax burdens in the six premier cities for the fiscal year 1928-29 stood as follows:

City	National tax (Y. 1,000)	Prefect- ural tax (Y. 1,000)	Municipal tax (Y. 1,000)	Total (Y. 1,000)	Per household	Per capita
Tokyo	37,036	10,642	19,794	71,097	¥152.0	¥33.2
Kyoto	5,662	2,551	4,860	14,786	93.9	20.6
Osaka	23,214	9,898	22,073	61,568	117.5	27.2
Yokohama ..	5,243	4,454	3,800	13,496	112.1	25.5
Kobe	5,852	3,709	4,360	14,033	86.3	21.2
Nagoya	5,403	4,466	6,956	17,735	93.1	21.2

Municipal Assets and Liabilities

The assets of the six premier cities at the end of 1925 were as follows:

	Total amount (Yen 1,000)	Per household Yen	Per capita of Pop. (Yen)
Tokyo	383,295	891	192
Kyoto	42,146	283	62
Osaka	472,631	976	223
Yokohama	33,039	346	81
Kobe	43,244	285	67
Nagoya	69,647	424	90

The amount of outstanding liabilities at the end of 1927 is as follows:—

	Total amount (Yen 1,000)	Per household (Yen)	Per capita of population (Yen)
Tokyo	369,607	859	185
Kyoto	30,741	206	45
Osaka	275,232	568	130
Yokohama	64,087	671	157
Kobe	88,840	586	137
Nagoya	41,663	253	54

Municipal Budgets

As shown in the municipal budgets for the fiscal year 1926-27, the revenue and expenditure of the six premier cities are as follows:—

Revenue (in ¥1,000):	Tokyo	Osaka	Kyoto	Yokohama	Kobe	Nagoya
Revenue from taxes...	21,223	20,769	5,736	2,211	5,215	6,411
Water rates & fees....	4,660	4,452	1,102	1,480	1,829	1,153
Car fare & electric supply	43,497	37,174	9,029	3,040	12,360	5,413
Loans & borrowings...	119,321	33,374	1,285	17,226	17,069	12,834
Income from properties	2,581	2,779	237	628	263	102
Subsidies	31,729	5,045	1,040	8,864	995	1,088
Total incl. others.....	253,755	182,049	23,344	39,948	42,581	33,365
Expenditure (in ¥1,000):						
Ordinary	72,754	69,180	13,101	7,635	16,300	10,012
Extraordinary	186,804	112,869	14,812	33,647	28,750	23,792
Total	259,558	182,049	27,912	41,282	45,049	33,804
Main items of the expenditure are as follows (in ¥1,000):—						
Offices	5,767	2,894	542	646	1,257	744
Public works	54,770	33,525	3,188	10,495	1,895	2,650
Public health	6,152	2,583	1,047	1,006	1,343	1,353
Water works	13,756	6,535	1,468	2,617	2,785	2,697
Social works	4,564	796	87	978	410	141
Electric works	61,725	43,159	6,073	4,838	11,822	6,647
Loans & borrowings....	68,297	27,430	4,185	8,056	17,933	11,646
Education	22,978	13,168	4,593	4,200	3,207	5,765
Total incl. others.....	259,558	182,049	27,912	41,282	45,049	33,804

Social Works in the Six Municipal Budgets

With the growing importance of social problems in general, the municipal authorities are attending to various social and

relief works, though financial considerations are hampering their activities in this direction. The following table is taken from the report of the Home Office for the 1926-27 fiscal year:

	Total expenditure	Social work fund
Tokyo	¥259,557,510	¥4,564,134
Osaka	182,049,758	795,921
Kyoto	27,911,730	88,657
Yokohama	41,282,095	978,363
Kobe	45,049,327	410,314
Nagoya	33,803,922	140,599

Among the various social undertakings calculated to give relief to the increasing pressure on living, there are two that deserve brief mention, as they have been taken up in recent years by various municipal authorities especially in the six premier cities. These are (1) the "public market" and (2) the "common dining halls."

The Public Market.—The first market of this nature was established in Osaka in 1918, soon after the "rice riots" that had broken out in many parts of the country. At first rice was the sole article offered for sale, but subsequently the list has been very much enlarged and at present it covers most articles of food and other commodities of daily necessity. Exempt from tax, supplied direct by producers, and enjoying other advantages that tend to reduce the cost, articles on sale at the public markets are reputed cheaper though considered a trifle poorer in quality than those brought by errand-boys of retail-merchants to their regular customers. Those who patronise the public markets are people in middle and lower classes, and it is believed that the habit of buying direct at shops will grow, our people now being so dependent on their regular retailers as to leave them free to bring articles at their option. They are too indolent or shy to do shopping by themselves of such articles. The example set by Osaka has spread to other cities, and at present there are in Tokyo as many as 48 such markets, in Osaka 17 and a number at Kobe, Kyoto, Nagoya and some other places. The public markets were at first temporary barrack sheds, but many have since been rebuilt in permanent style.

So far as the result realized at the ten municipal markets run by the Osaka municipal authorities is concerned, it is said to be a fairly good success. The monthly turnover is put at about one million yen each, but at the public markets in other cities, in Tokyo, for instance, the result is said to be far less satisfactory, some having been even closed owing to scanty patronage. At first no fee was charged on retailers using the stalls at a public market, but at present in most places the stall-keepers are charged a certain rate. Rates in Tokyo range from ¥10 to ¥2 per tsubo per month according to the location.

The Common Dining Halls.—Interesting to note the first common dining hall in Japan, that in Tokyo, owes its existence to a philanthropist, who, with the idea of supplying cheap and wholesome food to poorer people, started in 1918 the "Democratic dining hall" on the modest scale of serving 60 sitters at a time. Then appeared similar establishments in Osaka, Nagoya and other cities, most of them run by religious and other charitable

bodies, and a few as municipal undertakings. At first the charges were 8 sen for breakfast and 10 sen for either dinner or supper, but the tariff has been somewhat advanced lately owing to rise of market prices. At a model municipal hall in Tokyo 10 sen for breakfast and 15 for either dinner or supper is a rule, while in a corresponding establishment in Osaka the tariff is uniform, 12 sen.

HOUSING QUESTION

The housing question has become in Japan one of great urgency as it is elsewhere, the shortage of dwelling houses being keenly felt in all urban districts. According to the latest researches of the Home Office shortage of dwelling houses throughout the country is represented by 122,821, of which the shortage in Osaka reaches 23,000, in Tokyo 17,000, and in Fukuoka 13,000. The number of houses planned during the year 1920-21 with low-interest fund specially advanced for the purpose by the Government was only 15,501, or about 10% of the houses required. Even that 10% has by no means been completed as planned at first, for in point of fact only 1436 houses were built during the year, so that the housing troubles remain as grave as before. To take the instance of Osaka city, whereas in 1914 tenantless dwelling houses were reported at 13,987 out of the total number of 225,044 i.e. 6.23%. This percentage had fallen to 0.12 by the end of Aug. 1920. The average space allotted per head is about 45 sq. ft.

The rent has steadily risen, and in Osaka the rate has been quadrupled during the last fifteen years. In 1919-20 it advanced as much as 33% of the total. The fact that between 30 and 35% of laborers and lower school masters earning only at best ¥30 a month are obliged to pay ¥5-6, i.e., about 17-20% of their income for rent, is significant. This alarming shortage of houses places tenants at the mercy of avaricious landlords. They are also in constant danger of being preyed upon by dishonest house-agents, many of whom are little better than swindlers. In these circumstances troubles between houseowners and tenants have become the order of the day, especially in Tokyo and Osaka.

With a view to relieving the situation, the Home Office and Communications Dept. announced in 1920 that they would advance on a low interest ¥6,263,000 and ¥1,880,000 respectively to their building fund. Next the Dwelling House Association Law and revised Lease Law were enacted in 1921, the former regulating the advance of money by provinces and districts for building purposes and the latter determining the legal relations between lessors and lessees of both lots and houses, besides safeguarding the interest of the lessees. The latter law was put into force on May 15 in 5 cities, Tokyo, Osaka, Kyoto, Yokohama and Kobe.

The Dwelling House Association Law that was put into execution in July, 1921, has been followed by the formation of no less than 2,400 associations in urban districts, their applications for loans summing up to ¥160 millions. It was in October of the same year that the sanction was issued for the first time, i.e.

to the Kagoshima Association, which is composed of almost all the salaried-men of middle or lower rank in the city. Of the total building fund required amounting to ¥726,700, the members are to pay in as first instalment ¥58,136, the balance to be advanced by the Home Office. (See also Chapter on Housing Problem, Supplement, 1927 edition).

THE SIX PREMIER CITIES

1. Tokyo

Finance.—The finances of the city of Tokyo made a sudden expansion after the war with Russia. With the adoption of the tramway municipalization scheme in 1911-12 the figures swelled further. Details are shown:

Year ending March	Revenue Yen 1,000	Expenditure Yen 1,000
1925	214,978	150,234
1926	197,545	160,608
1927 (estimate)	261,635	257,578
1928 "	247,800	245,562

The enormous increase of the municipal finances obliges the Tokyo citizens to bear an exceedingly heavy taxation, this being at present more than quintupled compared with ten years ago. Details are shown below (in ¥1,000):—

Year	Additional	Special	Special taxes for street improvement	Total
1924	12,717	1,952	1,887	16,556
1925	14,802	1,817	1,504	18,123
1926	15,006	2,091	2,449	19,546
1927 (estimate) ...	17,118	3,559	—	20,681
1928 " ...	16,034	3,756	—	19,790

The following shows the revenue and expenditure of the general account and 14 special accounts of the Municipality Budget for 1927-28 and 1928-29 (in ¥1,000):

	1928-29		1927-28	
	Revenue	Expenditure	Revenue	Expenditure
City (general)	126,151	126,151	99,244	99,244
Waterworks	22,047	22,023	19,888	19,888
Sinking fund for pub. loans.	33,025	33,025	34,739	34,739
Mutual relief against fires..	1,017	1,017	851	851
Public dining rooms.....	502	477	572	559
Workhouse	6,966	6,963	7,876	7,876
Electric tramway	47,940	47,940	50,774	50,774
Electric power supply.....	12,256	12,256	11,462	11,462
Elec. undertaking sinking fund	41,345	37,072	36,289	33,136
City poor house	710	710	828	828
Total including others...	331,194	325,880	293,356	289,469

Sewerage System.—The comprehensive sewerage system first adopted in 1908 and revised in December 1924 with the approval of the Central Government is based on this datum; population

to be served 3,000,000; one half of the daily wasted matter to be discharged in 8 hours, supposing the per capita per diem waste to be 6 cubic shaku; maximum rainfall per hour estimated at 50 mm. The whole city is subdivided into three drainage sections and the sewer-conduits measure 712,000 "ken" in all. The area to be drained totals 20,768,000 "tsubo." Started in 1911 the work was partially completed before the disaster of September 1923, which has very much dislocated the prescribed arrangement. At present the work is included partly in the Government rehabilitation and partly in the municipal improvement program. The former has set apart ¥43,580,000 for the purpose, the work to extend from the 1923 fiscal year to the '28. For completing the remaining sewerage work and repairing the earthquake damage something like ¥76,000,000 will be necessary, a sum which the city can ill afford to meet at present. The municipal authorities have therefore decided to reserve it for the 1919-36 period work. Meanwhile for 20 places mostly situated in the saved area of the city, which from their natural formation have frequently been flooded on occasion of heavy rain, the same authorities have begun improvement work at the estimate of ¥4,580,000, spread over from 1925 to 1929. With the commencement of the municipal sewerage work the suburban towns have, at the instance of the city, also started or are about to start their own sewage improvement.

Road-making and Improvement.—The road-making and improvement program of the prefecture and city of Tokyo has undergone radical change since the disastrous occurrence of 1923. There are, however, several items for which the design remains unaltered, except for the extension of the period of completion. One of them is to construct around the city a "circular" 12-"ken" road extending 19 m. 26 ch. 6 yd., besides the urban terminals of a little under 3 m. The whole is estimated to demand ¥25,000,000 approximately. The other is called the "radial" road, comprising the four national highways existing from olden time. The total length is 19 m. 16 ch. 5 yd. besides about half a mile terminals in the city. The effective width will be 48 to 72 feet and the expense is estimated at ¥18,750,000. The two road-makings were originally designed for completion in nine years beginning 1921, but the period has been extended five years.

Pavement Work.—The pavement work was started by the city in the 1921 fiscal year as a six-year program for principal thorough-fares of 36 feet or over in width, but it has been transferred to the control of the Rehabilitation Bureau in greater part. At the same time the city took up on its own account the paving of part of the saved area as a four year work to be completed in the spring of 1926. The area to be treated total 348,000 "tsubo" and the estimated cost was ¥3,100,000. The area of pavement work completed by the spring of 1926 was, however, only about 190,000 "tsubo" or 239,000 metres in length, the average cost being ¥45 per "tsubo." The materials used are wood-blocks, asphalt concrete, and cut stones. Some parts will be macadamized.

Bridges.—The bridges now number more than they were before the disaster, as those burnt have been either reconstructed or repaired while there are several newly constructed. The river

Sumida is now spanned by ten large bridges of which four have been newly built. Two more were constructed in other parts of the city. Taught by the tragic experience of 1923 they have been constructed fire-proof.

Waterworks.—The water supply arrangements in Tokyo date back more than 350 years ago to the time of the Tokugawa Shogunate, when the primitive mode of conducting water by wooden pipes was adopted. This device was continued well into the era of Meiji. In 1892-98 the work of renovation was carried out at an estimated outlay of ¥9,189,000 met by means of foreign loans. The work was based on the plan of providing for 1,500,000 people at the rate of 4 cubic "shaku" per head. To meet the demand of the fast growing consumption a further expansion was decided upon in 1912 at an outlay of ¥20,720,000 on a 7 year program, further to be increased in 1920 to ¥47,600,000 in anticipation of the probable rise of prices by 1928. The seismic disaster of 1923 retarded the expansion work intended to supply 17,280,000 cubic "shaku" a day on an average for 3,000,000 people. In 1924, the construction of part of the second period work requiring speedy execution was started with an outlay of ¥4,700,000 as a work spread over 3 years, and in 1926 the construction of two new additional reservoirs for completion by 1931 at an estimate cost of ¥22,360,000 was taken up. The condition of water supply in the last few years stood as follows:—

End of March	Private metres	Houses supplied	Common metres	Houses supplied
1925-6	110,450	115,181	1,206	13,436
1926-7	115,519	122,430	1,180	12,771
*1927	108,751	125,086	1,158	11,871

* end of June.

Compared with the similar figures for 1922 the above returns indicate a marked falling-off particularly in the number of common metres and houses supplied, the decrease being due to the quake disaster of 1923 which devastated greater portion of the downtown.

Electric Tramways.—The municipalization of street tramways was realized in 1911. The purchase of the three tramways was effected at the cost of ¥63,915,000. The data of the service in the recent years are tabulated below:

Year ended March	Mileage open to traffic	Average working mileage per day	No. of passengers carried per day	Passenger receipts per day Yen
1922	185.192	172,270	1,306,971	86,784
1923	162.703	143,511	1,177,303	71,608
1924	192.972	163,856	1,394,456	81,728
1925	194.424	186,940	1,291,149	85,601
1926	195.779	179,133	1,216,255	80,036

As auxiliary traffic organs, the Municipality opened in the autumn of 1923 the street motor bus service, 395 cars being employed at the end of 1926. The charge is 7 sen each section.

Electric Lighting.—The Municipality also operates electric lighting business which it took over from the Tokyo Street Tramway Co., when the electric tramways were municipalized. The intrusion of the Municipality in this field has proved an occasion

for breaking down the monopoly so far held by the private electric companies, and in lowering the tariff. The number of lamps totalled 2,033,124 in the city alone at the end of 1926, the figure representing the share of the two rival Cos. doing business in the city.

Municipal Assets & Liabilities

Assets.—The assets of the Municipality are tabulated below (¥1,000):—

End of Dec.	1927	1928	1929
General:—			
Public bonds, shares, and other securities	1,179	181	186
Deposits, loans and cash	11,942	1,500	1,146
Land	235,630	33,845	24,465
Buildings	14,865	12,817	10,737
Other properties	112,759	2,434	1,980
Total	376,385	50,776	38,514
Electricity Dept.:—			
Land	20,205	9,577	8,509
Buildings	10,418	6,577	4,813
Tracks	28,997	23,155	20,531
Vehicles	4,870	24,226	21,290
Plants, etc.	—	—	—
Elec. wires	31,207	26,256	21,908
Total incl. others	526,627	108,737	94,408

The Municipal liabilities outstanding at the end of Mar. 1928, amounted to ¥445,287,978 or ¥277.06 per capita of population. In October 1926 a ¥60 million loan was floated in London to supplement the rehabilitation work fund.

2. Osaka

The "Greater Osaka" Program

By the absorption of the outlying district the industrial city of Osaka has outstripped Tokyo in area and population and has become the largest city of Japan, the ambitious program for realizing the Greater Osaka plan having been effected by 1928 with a fund of ¥200 millions. To mention the principal features of improvement the main thoroughfares will be widened; all wooden bridges be replaced by new structures of fire and earthquake-proof material, and subways and elevated street car lines, besides the surface electric railways, will be operated. The plan also provides for the establishment of a central city market with a site of about 30 acres by 1928, and water supply capacity will shortly be increased to 128,000,000 gallons a day from 84,000,000 as at present. On the completion of the consolidation of the two adjacent counties with the city, it must be added, the industrial capacity of Osaka has been augmented by about 150 per cent.

The estimate accounts (both general and special) of the city for 1926, 1927 and 1928 stood as follows (¥1,000):—

Year ended March	Revenue	Expenditure	Per capita
1926	¥182,049,758	¥182,049,758	¥ 86.08
1927	227,508,720	227,508,720	100.71
1928	212,718,060	212,718,060	94.17

Details of the 1926-27 and 1927-28 estimates stood as follows (¥1,000):—

	1927-28		1926-27	
	Revenue	Expenditure	Revenue	Expenditure
Waterworks	7,795	7,795	9,674	9,674
Elec. tramway	69,095	69,095	73,954	73,954
Harbor expenses	6,137	6,137	6,418	6,418
Others	161,849	161,849	80,124	80,124
Total	204,812	204,812	70,171	170,171

Principal Special Account Undertakings

1. **Waterworks.**—The genesis of the Osaka waterworks dates back to 1895 when the river Yodo that runs through the city was utilized for supplying water to 610,000 persons. This was next extended so as to provide for 800,000 and further for supplying a million more. The last work was commenced in 1907 as a 7 year program. The cost amounted to ¥10,630,000 of which ¥2,230,000 were supplied from the State treasury. A further expansion scheme is now under investigation.

The condition of water supply at the end of 1926 was as follows:—Number of houses getting supply from the common and private sources 206,374, others 191,756; volume of water supplied measured 550,010,000 "koku" or 1,506,000 "koku" per day.

2. **Electric Tramways.**—From the very outset the Osaka Street Electric Tramway was a municipal undertaking, and at present 112.10 miles are open to traffic. Data of traffic service for the three years ending 1926 are as follows (1,000):—

Year	No. of Passengers	No. of Passengers per day	Passenger receipts (Yen 1,000)	Passenger receipts per day (Yen)
1924	300,283	823	17,044	46.7
1925	304,643	835	17,270	47.0
1926	309,136	856	17,530	47.4

The Municipality obtained charter in June '27 for the construction within the city limits of both underground and overhead high speed four electric railway lines extending 33.65 miles, as an 8-year program commencing 1929. The expenditure amounting to ¥163 millions is to be raised by loans.

3. **Harbor Works.**—The Osaka harbor works were started in 1897 on an 8 year program, at the estimated cost of ¥22,570,400, of which ¥4,680,000 and a portion of land estimated at ¥1,900,000 came from the State treasury. Owing, however, to a marked rise in material and wages, a further extension involving ¥2,200,000 on a 10 year program was made in 1906. The principal works including jetties, warehouses, coast protection, canals, etc., are now almost completed and the port, about 1,800 acres, has suddenly gained in importance with regard to import trade since the Great War.

4. Sewerage Works.—Warned by the outbreak of virulent epidemics in 1886 and 1890 of cholera and dysentery the city undertook the improvement of sewerage work in 1894-99 as regards the old city. In 1911 a further improvement was planned on a 10 year program at an estimated outlay of ¥4,500,000, one-third of which was supplied from the State treasury. The work was started in 1909 and has been completed already, and today Osaka presents even better health record than Tokyo.

Municipal Liabilities

The four big enterprises of Osaka city mentioned above involved the Municipality in a heavy debt amounting to about ¥83,700,000. The loans outstanding at the end of June, 1926, totalled ¥268,841,000 including 2 water works loans for ¥36,628,000; 3 harbor loans, ¥19,010,800; 5 electric tramway loans, ¥39,423,600; 2 sewerage loans, ¥13,579,000, etc. The total indebtedness works out to ¥127.00 per capita of population. At end of March 1927 the total lessened to about ¥221,000,000. It may be stated the Municipality expected to complete the redemption of principal and interest by 1924, with revenue obtained from taxation (¥61,000,000), electric tramway service income (¥17,000,000), water charges (¥17,000,000), receipts from the harbor (¥11,000,000), proceeds from sale of reclaimed land (¥3,200,000), income from properties (¥3,700,000) and miscellaneous receipts (¥6,500,000).

3. Kyoto

Municipal Finance

The ordinary finance (general account) of the city is as shown below:—

Fiscal year	Revenue	Expenditure
1925-26	¥15,323,719	¥10,926,579
1926-27	14,144,609	11,171,921
1927-28	10,578,965	10,578,965

The special account for 1926-27 stood as follows:—

	Revenue	Expenditure
Canal and water-power works..	¥ 4,947,264	¥ 3,938,669
Waterworks	2,785,583	2,225,614
Electric tramway	8,973,787	6,371,606
Other	20,309,910	14,809,029
Total	51,161,153	38,516,839

The three leading municipal undertakings, i.e. Canal and Water-power works, Waterworks, and Electric tramway, are described below:—

1. Canal & Water-power Works.—The first Biwa Canal that was completed in 1895 at the cost of ¥1,838,317 was designed for the conveyance of passengers and goods and also for the supply of waterpower, while the second canal, ¥4,477,805, and completed lately, supplies water for drinking, fire brigade and for purposes of hydro-electricity, etc.

2. Waterworks.—The waterworks started in October, 1908,

were completed in March, 1912, at the cost of ¥3,000,000 of which ¥750,000 came from the State treasury. The water is drawn from Lake Biwa by means of the second canal and was designed as the first term work to provide for 500,000 people and 200,000 for the second, the rate being calculated at 3.5 cubic "shaku" per day per head, with a maximum consumption of 4.9 cubic "shaku."

3. Electric Tramways.—The municipal street tramway service commenced in 1908 now extends for 57.7 miles. Besides, there are five private tramways run both in the city and suburbs with the combined mileage of over 50 miles. The results of working in 1927 are tabulated below:—

	No. of passengers	Passenger receipts
Municipal	97,382,199	¥5,597,221
Keihan Electric	35,592,118	5,355,338
Keishin Electric	4,807,330	668,157
Ranzan (Arashiyama) Electric	6,370,089	436,415
Kitano Electric	—	—
Elzan Electric	3,160,429	553,967

Municipal Liabilities

Municipal debts outstanding at the end of 1926 totalled ¥22,943,214 or ¥45.66 per capita of population.

4. Yokohama

Municipal Finance

The annual revenue and expenditure (estimate) of Yokohama amounted to (in ¥1,000):—

Fiscal year	Revenue	Expenditure	Per capita
1927-28 (estimate)	28,739	37,450	¥ 70.89
*1928-29 (")	61,132	61,132	114.19

* include special account.

Special Account

Special account of the Municipality consists of 13 items including Reconstruction work, Waterworks, Electric business, Gas works, Hospital, former Concession account, Cemetery and Crematory, etc. The urban tramway service is managed by a private concern under special contract with the city.

Electric Tramways.—The municipal electric tramways traversing important sections of the city now extend 33.5 miles as at the end of Mar. '28.

Gas Works.—The works were first started as a private enterprise but were municipalized in 1892. The estimate accounts for 1927-28 put revenue and expenditure at ¥1,569,874. The pipes laid measure about 317.24 miles and about 170,000 households have connection.

Waterworks.—The waterworks enjoy the honor of being the pioneer in Japan and the estimate account for 1927-28 is ¥3,488,589 both for revenue and expenditure.

Harbor Work.—The harbor work, originally started in 1900,

and practically finished in 1917, sustained an extensive damage in the earthquake disaster of '23. The 3rd period work which was being carried on since 1921 was temporarily suspended. The repair of the work damaged in the disaster was in greater portion finished in Feb. '25, the remaining work to be completed by 1931 at the estimate cost of ¥22 millions.

Municipal Liabilities.

The Municipal liabilities outstanding at the end of Dec., 1926, totalled ¥79,733,000 or ¥181.00 per capita, this being the greatest of all the six cities. In November 1926 a municipal loan totalling \$19,740,000 was floated by the city in New York.

The Greater Yokohama

In April '27 the Greater Yokohama plan was put into effect by absorbing the outlying districts comprising two towns of Tsurumi and Hodogaya and seven villages, all these embracing 22,922 households with 109,193 inhabitants. By the absorption the city has had its area trebled and its population increased by over 100,000 as shown below:—

	Area (sq. miles)	No. households	Population
New Yokohama	51.69	82,229	515,081
Old Yokohama	14.53	59,377	405,888

Tsurumi being a promising thriving industrial town lying between Yokohama and Tokyo, its annexation is judged as an important addition to the prosperity of the city, which being hilly in the rear and rather narrow in extent is unfit for industrial activity. Tsurumi and adjacent district, while facing the water front of the harbor have sufficient level space in the rear to enable the new Yokohama to grow as an industrial city. Following this absorption the new city was divided into the following five sections on October 1, '27:

	Population*	No. Households*	Area (sq. miles)
Tsurumi-ku	58,003	12,735	7.62
Kanagawa-ku	111,716	24,213	17.03
Naka-ku	296,492	66,813	12.92
Hodogaya-ku	27,641	7,512	7.33
Isogo-ku	29,745	6,579	6.79
Total	523,597	117,852	51.69

* Figures based on the census at the end of Dec. 1926.

5. Kobe

Finance

Annual finance of Kobe City has shown a marked decrease as follows (incl. special accounts):—

Fiscal year	Revenue	Expenditure
1925-26	¥68,619,009	¥60,368,506
1926-27	62,492,294	54,002,182
1927-28 (estimate)	52,121,982	52,121,982

The Municipal liabilities outstanding at the end of April, 1927, totalled ¥86,637,766 or ¥133.80 per capita of population.

Municipal Undertaking

Water supply is the only undertaking Kobe conducts on its own resources, electric lighting, urban tramways and gas works being all left to private enterprises, while the reconstruction of the harbor is a State undertaking to which the city has been obliged to contribute about ¥3,000,000. Kobe, is, however, free from foreign encumbrances, all the loans being domestic.

Waterworks.—The Municipal authorities have been much troubled about the inadequate arrangements of water supply. The waterworks were at first designed in 1909 to supply 3 cubic ft. per capita a day to 250,000 inhabitants, but the plan was later altered in scope and made to provide for 100,000 families, 25 c. ft. a day. The work extended till 1923 and required the expense of ¥12,858,720 of which the State grants amounted to ¥3,403,000. In 1926 the Municipality carried out an expansion work in the water supply for the city by laying pipes in the eastern suburbs to draw more water from the rich Chikari pond behind Mt. Rokko, and the work has been already finished, supplying 2,587,189 c.f. per diem to 151,505 households or 644,212 population.

Electric Tramways.—The tram-system within the city limit is operated by the Municipality, the total open mileage at the end of March 1928 being 34.3 miles with 79 stops and 240 cars. There are three private tramway companies attending to the suburban service, viz., the Ujikawa Electric Tramway (Akashi-Kobe), Hanshin Electric Rly. (Kobe-Osaka) and Hanshin Express Electric Rly. (also Kobe-Osaka). A new electric tramway was laid between Osaka and Kobe in 1927, forming a parallel line to the State railway and the Hanshin lines. The results of working of these tramways for 1926-'27 are as follows:—

	Per day	
	No. of passengers	Receipts (Yen)
Municipal line	278,580	13,714
Hanshin Electric Rly.....	149,747	16,606
Hanshin Express Electric Rly.	40,444	8,462
Ujikawa Electric Tramway...	40,402	4,211

Harbor Works.—The first term work extending over 16 years, started in 1907 at the total cost of ¥15,090,000 of which ¥3,660,000 was borne by the Municipality, was completed in May 1922. The harbor now has four quays with berth for 19 boats of 3 to 20 thousand tons at the same time. The second term work which was taken in hand in 1919 as ten years' undertaking with a view to reclaim a water-front of about 91,600 "tsubo" is now in progress. Upon its completion the harbor will have capacity for 15 more steamers of larger type.

6. Nagoya

The municipal finances of Nagoya, according to the estimates for 1927-28, amounted to 13,065,757 in revenue and 13,065,757 in expenditure.

Nagoya manages on its own resources its waterworks, sewerage, street tramways, butchery, public cemetery and the disposal of night-soil, none of which is of a nature to embarrass the Municipal finance as in the case of Osaka and Kyoto. The waterworks, started in 1907, was completed in 1914 at a cost of ¥5,270,000, and has the capacity to supply 1,840,000 cubic ft. a day to 460,000 people. The sewerage system, which commenced in 1904, was brought to a finish in 1923 at the cost of ¥4,453,763. The subsidy from the State treasury amounted to ¥1,264,273 for the waterworks and ¥1,202,000 for the sewerage. The necessary sum was raised by floating municipal loans. Owing to the fast increasing population and the insufficient water supply the Municipality set about in 1926 an extension work with a view to supply 3,880,000 cubic ft. a day to 970,000 people, at the estimated cost of ¥8,197,298. The work is to be completed in 1930.

The street tramways formerly conducted by a private concern was municipalized in 1922 at the cost of ¥11,927,364. The line now extends 31.76 miles. It has been decided to construct about 34 miles of new lines at the estimated cost of ¥28,140,000 spread over 8 years, the work being started in 1926.

The indebtedness of the city as outstanding at the end of April, 1928, amounted to ¥39,776,800 or ¥51.76 per capita of population.

CHAPTER XXXVII

CHOSEN (KOREA)

GEOGRAPHY

Chosen (Korea) is one of the largest peninsulas on the east of Asia, and projects between the Sea of Japan and the Yellow Sea. It lies between L. $33^{\circ} 6' 40''$ N. and $43^{\circ} 00' 36''$ N. and L. $124^{\circ} 11'$ E. and $130^{\circ} 56' 23''$ E., and is nearly as large as the Main Island of Japan proper, covering an area of 85,228.68 sq. miles. In the north the Peninsula is separated from Manchuria and Siberia by the rivers Tumen and Yalu and "White" Mountain. In the south the Peninsula faces Kyushu across the Strait of Chosen while the historic island of Tsushima lies only 30 miles away, forming a stepping stone between the two lands. The Gulf of Gensan on the east coast and the river Tadong flowing into the Yellow Sea practically divide the Peninsula into two parts, northern and southern Korea. A watershed runs through both parts, lying nearer the eastern than the opposite coast. Northern Korea is mountainous and rich in timber. In southern Korea the peak of Kongo, noted for its picturesque scenery and magnificent Buddhist temples, towers on the north-east. The south-western district is the best land in Korea and is generally well cultivated. The rivers are larger than those in Japan proper and at full tide many of them can float boats far up the streams. The height of the tide is especially conspicuous on the western coast. In the vicinity of Jinsen, for instance, it reaches as high as 33 ft., though on the opposite side it is only one ft. The climate is comparatively mild for its latitude in the southern part but in the north a rigorous climate, almost like that of Manchuria, prevails.

METEOROLOGICAL OBSERVATION (Average Record)

Temperature

	Fusan C.	Jinsen C.	Gensan C.	Seoul C.	Pyongyang C.
Highest	35.0	36.5	39.6	37.5	36.4
Lowest	(—)14.0	(—)20.9	(—)21.9	(—)22.3	(—)28.5

Weather Condition in the Year

	Fusan	Jinsen	Gensan	Seoul	Pyongyang
Clear or cloudy days.....	201	186	212	178	188
Rainy or snowy days.....	107	105	119	112	104

	Fusan	Jinsen	Gensan	Seoul	Pyeongyang
Early frost	Nov. 10	Nov. 7	Oct. 23	Oct. 15	Oct. 14
Late frost	Mar. 25	Apr. 6	Apr. 14	Apr. 21	Apr. 23
Early snow	Dec. 25	Nov. 17	Nov. 17	Nov. 17	Nov. 16
Late snow	Mar. 7	Mar. 23	Apr. 5	Mar. 27	Mar. 28

Population

The result of the first decennary census taken on Oct. 1, '25, makes the following showing (the figures representing the total of natives, Japanese and foreigners combined):—

Household	Male	Female	Total
3,720,937	10,020,943	9,502,002	19,522,945

Compared with the figure for 1920, the total population shows an increase of 13.1% or 2,258,720 and an increase of 947,410 as against 18,068,116 at the end of 1924. The density of population is 1,364 per square "ri" (15 kilometres).

Natives

Dec. 31	Household	Male	Female	Total
1923	3,282,792	8,970,812	8,476,101	17,446,913
1924	3,309,451	9,045,641	8,573,899	17,619,540
1925	3,483,481	9,466,994	9,076,332	18,543,326
1926	3,483,779	9,509,323	9,105,710	18,615,033

Dec. 31	Birth			Still-birth		
	Male	Female	Total	Male	Female	Total
1923	370,411	339,497	709,908	1,751	1,416	3,167
1924	363,478	317,350	680,828	1,895	1,578	3,473
1925	376,620	335,658	712,278	1,579	1,217	2,796
1926	355,630	310,074	665,604	1,770	1,428	3,198

Dec. 31	Death			Marriage & Divorce	
	Male	Female	Total	Marriage	Divorce
1923	190,392	168,966	359,358	258,167	8,797
1924	201,096	177,683	378,779	154,809	7,041
1925	205,448	179,225	384,673	169,964	7,607
1926	202,162	178,199	380,361	167,409	6,988

Dec. 31	Ratio per 1000 population				
	Birth	Still-birth	Death	Marriage	Divorce
1923	40.60	0.18	20.60	14.80	0.50
1924	38.64	0.19	21.50	8.79	0.40
1925	38.68	0.15	20.75	9.17	0.41
1926	35.76	0.17	20.43	8.99	0.38

Japanese in Korea

Till the war of 1904-5 the number of Japanese settlers in the Peninsula did not exceed forty to fifty thousands, but thereafter it has increased at the rate of 20 or 30 per cent. annually, and at present the Japanese form 2.25% of the total population.]

Year	Household	Male	Female	Total
1922	106,991	204,883	181,610	386,493
1923	110,439	212,867	190,144	403,011
1924	111,919	216,429	195,166	411,595
1925	113,254	221,163	203,577	424,740
1926	117,001	230,228	212,098	442,226

Population in Principal Cities (at end of 1926)

	Japanese	Korean	Total incl. others
Keijo (Seoul)	81,559	220,312	306,362
Jinsen (Chemulpo)	11,651	39,993	53,741
Gunsan	7,558	14,494	22,537
Taiku	23,513	53,174	77,263
Fusan	40,803	64,928	106,323
Heijo (Pyongyang)	23,545	89,972	114,371
Chin-nan-po	4,956	22,902	28,906
Gensan (Wonsan)	9,299	25,315	35,435
Mokpo	7,280	19,993	27,521
Shingishu (New Wiju)	6,193	13,746	23,893

Foreigners in Korea

Year	Male	Female	Total
1923	30,640	4,399	35,039
1924	31,852	5,129	36,981
1925	41,147	6,313	47,460
1926	40,452	6,089	46,541

Classified according to nationality these give in 1926 the following statistics:—Chinese, 45,291; Americans, 756; English, 228; French, 76 Germans, 45; Russians, 126, etc.

**THE KOREAN ADMINISTRATIVE POLICY
AS REORGANIZED**

In Aug. 1919, the regulations for the organization of administrative machinery in Korea were revised, with the object of replacing the former military government with one in which the civil factor should be predominant. Thus the Governor-Generalship of Chosen is now open to either a civilian or a military man whereas the post was formerly restricted to a General or an Admiral.

The reorganizing policy has since been carried out still further and many important reform measures suggested by the growing democratic tendency have been adopted. Among them may be mentioned,—Improvement of the Police system; uniform scale of salaries for Korean and Japanese officials; appointment of Koreans as school principals; higher education arrangement for Korean boys and girls; Korean Judges and Procurators invested with the same authority as Japanese; abolition of flogging; company regulations revised and made more liberal; recognition of religious bodies as juridical persons; permission to publish vernacular papers; partial adoption of the local self-government system, etc.

For the Government-General Office is appointed an Inspector-General of Political Affairs whose function is to assist the Governor-General and to inspect the official business of the Local Government and other various affiliated offices. The Government-General is divided into a secretariat office and ten departments, viz., Departments of General Affairs; Internal Affairs; Communication; Finance; Public Works; Railway; Agriculture, Commerce and Industry; Justice; Education; Police. The Chiefs of those Departments are of "Chokunin" rank.

Gendarmerie System Abolished.—The abolition of the gendarmerie system to be replaced by a civil police force is another significant feature of the revision.

Local Administration.—The thirteen Prefectures or Provinces of Korea are as follows:—

Province	Seat of office	Province	Seat of office
Kyongki-do	Seoul	Whanghai-do	Haifu
North Choongchong-do	Chongju	North Pyong-an-do..	New Wiju
South Choongchong-do	Kongju	South Pyong-an-do.	Pyongyang
North Chonla-do.....	Chonju	Kwan-won-do	Choonchon
South Chonla-do.....	Kwanju	North Hamkyong-do....	Ranan
North Kyongsang-do....	Taiku	South Hamkyong-do	Hamheung
South Kyongsang-do....	Fusan		

The Central Council

The Central Council is in effect a Privy Council and considers matters submitted to it by the Governor-General. The members of the Council consist of one President, one Vice-president, five Advisers, and 65 Councillors, all Koreans.

THE ROYAL HOUSE OF KOREA

The former royal family of Korea is treated as Prince of the Blood, and the head is known by the title of His Imperial Highness Prince Yi. The first prince after the annexation, Prince Yi Chiok, demised in April 1926, and was honored with State funeral held at Seoul on June 10 the same year. The present head, Prince Yi Kon, heir and brother to the former, married in April 1920 Princess Masako, daughter of Prince Nashimoto, a Japanese Prince of the Blood.

Korean Peers.—In Oct. 1910, 67 distinguished Koreans including five members of the former Imperial family, were created Peers, i.e. 6 Marquises, 3 Counts, 22 Viscounts, and 45 Barons. The new Peers were given monetary grants.

LOCAL SELF-GOVERNMENT

The creation of the local advisory bodies in Oct. 1920, as a preliminary step towards self-government, is an important innovation in the Japanese government in Korea. These are of three kinds: (1) Provincial Councils, (2) Municipal Councils and (3) Village Councils.

Provincial Council.—Consists of 18 to 37 members according to population. The membership is of two classes (1) elective and (2) nominated, the former constituting two-thirds of the entire number of members. These are appointed by the Governor from among a certain fixed number of candidates elected by the members of the municipal and village councils. Those eligible for candidacy are to be male subjects of the Japanese Empire of twenty-five years and over and with an independent means of livelihood.

It is presided over by the Governor who is, except when the urgency of the matter leaves no time for so doing, to convene the Provincial council and invite its views on all questions regarding the provincial finances. The council may memorialize the Governor on all affairs of public importance. Their term is three years, and the office is honorary.

Municipal Council.—Consists of 12 to 30 members, elected for three years without any salary by popular votes under a property qualification consisting of the payment of ¥5 and over per annum of municipal taxes. This restriction is applicable to the voters and the candidates alike. Presided over by the respective Prefects or Mayors, it deliberates upon the financial affairs of the municipality as submitted by the Mayor.

Village Council.—8 to 14 members are appointed by the respective District Magistrate or Chief of Island, for three years without pay, and presided over by the village headman. They discuss village finances. As an exception, 41 villages are allowed an elective system as provided for the municipalities in consideration of their population and their importance as political or economic centres.

School Council.—Besides there will be established in each administrative unit a School Council to discuss matters relating to Korean education. The status, election, etc. of the members are practically same as for the members of the Municipal and Village Councils respectively.

FINANCE

Imperial Treasury's Burden.—To enable the former Korean Government to meet the deficit in its Budget, the Imperial Government disbursed in the four years prior to the annexation ¥104 millions, of which ¥13,280,000 odd was in the shape of loans, free of interest. This was in consideration of the transfer of judiciary affairs to the control of Japan, and the prison expense devolving on the Imperial Treasury. With the annexation Special Account was established for the Government of Chosen, the expenditure to be met as a rule with the revenue of Korea and the deficit filled up with aids from the home Government. All public utility items as road-making, harbors, railways, etc. are defrayed with proceeds from public loans or borrowed money chargeable to the Special Account, while military and naval outlays are payable out of the General Account of the Imperial Government. The latter totalled ¥125,626,000 between 1910 and 1922. In 1919 the Government-General could dispense for the first time with financial help from the Imperial Government, but

the administrative reform carried out that year again required help from the home Government for the time being. It was ¥10 millions in 1920, ¥15 in '21, ¥16 in '22 and ¥15 in '23 and '24.

The Budget Expansion.—The budget has increased apace in recent years owing to the institution of various cultural enterprises undertaken so that what stood at the ¥158 million level both for revenue and expenditure in 1922-23, itself an increase of 100% over the figures in 1919-20 and 220% over 1911-12, has now reached over 200 millions.

Budget (in ¥1,000)

Revenue

Ordinary	1926-27	1927-28
Taxes	37,486	40,804
Stamp receipts	10,008	10,646
Yok-tun-to receipts	1,406	1,033
Gov't undertakings and property.	98,449	112,112
Other receipts	2,102	2,210
Total	149,453	165,773
Extraordinary		
Sale of Gov't property.....	3,945	3,523
National treasury grants.....	19,919	15,473
From general accounts.....	800	800
Loans	15,000	19,000
Surplus of previous year transferred	3,309	5,915
Total with others.....	43,372	45,136
Total revenue	192,825	210,910

Expenditure

Ordinary	1926-27	1927-28
Prince Yi's Household.....	1,800	1,800
Gov. General's Office.....	3,960	4,461
Justice and Prisons.....	7,088	7,639
Local administration	29,098	30,043
Education	2,072	2,302
Customs-house	978	1,000
Model farms	431	483
Central experimental station....	165	194
Afforestation	3,931	4,566
Communication	11,370	11,937
Railway working	41,814	43,006
Monopoly Bureau	17,362	21,301
Sundry expenses	931	1,017
Transferred to special account..	15,120	16,817
Chosen Hospital and Saisel-in...	686	688
Reserves	2,500	2,500
Total with others.....	140,339	150,879
Extraordinary		
Garrison	275	275
Investigation	463	535
Subsidies	14,175	15,500
Repairs and construction.....	3,322	4,527
Public works	6,806	7,694

Railways	15,000	19,000
Arable land adjustment.....	5,013	5,992
Railway stores	—	—
Sand arresting	600	700
Total with others.....	52,486	60,030
Total Expenditure	192,825	210,910

Continuing Expenditure (¥1,000)

	Total	Up to 1924	1925	1926
Chosen Shrine	1,564	1,331	233	—
Gov't offices	6,678	5,690	700	288
Telephone & telegraph.....	4,170	2,170	500	500
Roads	40,480	24,340	500	1,000
Harbor construction	28,080	23,860	800	1,000
Railways	268,889	153,981	10,000	16,500
Sand arrester	9,300	700	400	600
Extra. riparian work.....	1,051	827	224	—
Chosen Imperial Univ.....	1,668	394	300	500
Riparian work	9,300	—	700	1,200

Debts (September, 1926)

	Amount Yen 1,000	Interest per cent.	When issued	To be redeemed in
2nd Undertaking Loan.....	12,964	6.5	1908	1933
1st 4% Public Loan.....	1,052	4.0	1913	1940
Mark "Sa" & "Yu" Public Loans	7,599	5.0	1921-23	1976-78
Various 5% Exchequer bonds	233,769	5%	1922-25	1925-30
Various Undertaking Loans	43,221	5.5	1921-25	1924-30
Total	298,611	—	—	—

PUBLIC WORKS

There were formerly no "roads" to speak of in Korea, the river beds in many places having served as such in dry seasons. Since the annexation a complete system of roads has been laid out, consisting of 515 lines of roads of various classes totalling 15,000 miles in length. The greater part of these roads was completed by the end of 1923. The remainder is still in course of construction. Reconstruction of streets has also been carried out on an extensive scale, as the old streets were extremely narrow and dirty.

Rivers, which were found in the worst condition imaginable, mainly owing to complete deforestation throughout the country, have been investigated with the view to systematic control, and the works of improvement are already under way.

Harbor works were commenced with Fusan, where all the terminal facilities for the Fusan-Seoul Rly. have been completed. The construction of breakwaters and dredging are now in progress. At Jinsen a spacious lock-gate dock has been constructed to accommodate 2 ships of 4,500 gross tons and under, by taking advantage of the great tidal range (22-23 ft.) of the locality. The work cost ¥741,000.

Cities and towns with Waterworks already number 24 and are steadily increasing.

Irrigation works have been carried out on quite a large scale, mostly by the local unions specially formed for the purpose. At the end of 1922, the land irrigated covered no less than 850,000 acres.

FOREIGN TRADE

Volume of Trade (in ¥1,000)

With foreign countries:	Merchandise			Specie & Bullion	
	Imports	Exports	Total	Import	Export
1925	105,388	24,342	129,730	261	—
1926	123,984	24,779	148,713	230	—
1927	113,943	28,134	142,077	193	—
1928 (1st half)	72,860	15,299	88,159	—	—
With homeland:					
1925	234,624	317,289	551,912	549	4,358
1926	248,236	338,176	586,412	239	7,452
1927	269,474	330,791	600,265	326	5,263
1928 (1st half)	138,902	169,452	308,354	—	—

Staple Exports (¥1,000)

	1927	1926		1927	1926
Rice	191,575	192,568	Gold ore	1,451	1,346
Beans	23,996	24,388	Iron ore	1,085	772
Fish	12,497	14,762	Timber	3,161	5,098
Ginseng	2,033	1,714	Iron	5,565	5,703
(medicinal)			Cow hides	2,445	2,688
Cotton	4,186	4,554	Beche de mer..	—	1,405
Barley & Wheat	175	—	Pulp	814	2,352
Live stock	3,421	3,907	Fertilizer	7,083	8,772

Staple Imports (¥1,000)

	1927	1926		1927	1926
Rice	19,260	19,536	Silk piece goods	9,293	7,912
Millet	31,649	31,806	Grass-cloth ...	5,501	5,419
Flour	6,197	6,432	Cigars, cigarettes		
Sugar	7,736	5,195	& tobacco ...	5,203	5,944
Saké	1,410	1,490	Paper	6,216	7,003
Kerosene oil ..	5,355	3,784	Iron, rails, etc.	9,373	7,598
Ginned cotton.	6,408	5,012	Machinery	9,420	7,750
Cotton yarn ...	6,472	8,412	Coal	10,732	8,557
Sheetings	21,269	26,389	Timber	10,640	9,705
Cotton fabrics.	9,291	2,015	Beer	2,057	1,936

BANKS AND BANKING

Korea had no banks up to February 1903, when a branch of the Dai-ichi Bank was established and was authorized by both governments, Japanese and Korean, to issue convertible notes. With the establishment of the Bank of Chosen in 1909 the business of note-issuing and other privileges were ceded to the new bank as the central banking organ. The provincial hypothec banks organized in 1906 at various local centres were thoroughly re-

organized in June 1918, amalgamating them into one Chosen Industrial (Shokusan) Bank (Seoul), capital ¥30,000,000 ($\frac{1}{2}$ p. u.). It is authorized to issue debentures to an amount not exceeding 15 times the paid up capital and to furnish long-period loans at a low rate of interest to promote the development of agriculture, industry, fishery, etc. It has 52 branches at present. There are also 16 ordinary banks and 16 branches of Home banks including those of the Dai-ichi, the 130th and the 18th. Some of them are either purely Japanese or Korean enterprise and others joint establishments. In Sept. 1925, there were 511 petty banking organs backed by ¥5,751,667 p. u. capital and ¥3,350,725 granted by the Government, for the benefit of peasants, small traders and manufacturers. The banking statistics are as follows at the end of Sept. 1927 (in ¥1,000):—

	No. of Banks	p. u. capital	Reserve funds	Govt. loans
Bank of Chosen.....	1	25,000	1,001	1,200
Chosen Industrial Bank..	1	15,000	4,753	1,459
Ordinary Banks	20	16,950	3,563	165
	Bank Notes	Debentures	Deposits	Loans
Bank of Chosen.....	79,113	—	77,514	204,972
Chosen Industrial Bank..	—	162,629	54,348	232,748
Ordinary Banks	—	—	90,576	97,489

The Bank of Chosen (See Chap. on Banks, etc.)

AGRICULTURE: (1 cho=245 acres)

Arable Areas.—According to the latest official returns, the arable land in Chosen measures 4,348,355 "cho" including 1,563,736 "cho" of paddy fields and 2,784,619 "cho" of dry fields. Besides there are some 135,000 "cho" of fields laid out for temporary use.

The irrigation work extending over 15 years was begun in 1920-21 and is in progress to convert 202,500 "cho" of dry fields, marshes, etc. into paddy and also to improve the irrigation plan for 225,000 "cho" of the existing paddy fields.

Encouragement by the Government.—In March, 1907, a law encouraging the exploitation of State-owned uncultivated lands was promulgated, providing that anybody may rent uncultivated lands from the State for ten years or under for tillage, stock-breeding, etc.

Rice.—Rice is the staple product followed by wheat, barley, soya bean, cotton, etc. The cereal is fairly good in quality. The product in 1926 from about 1,575,000 "cho" of the rice fields was about 15,301,000 "koku" of which 5,785,000 "koku" valued at ¥192 million was exported to Japan.

Barley and Soya Bean.—Barley covers 828,267 "cho," yielding 7,815,898 "koku". Soya bean is exported chiefly to Japan for manufacturing soy, the export amounting to 1,402,000 "koku" valued at ¥24,390,000 in 1926.

Sericulture.—The climate of Korea is suitable for sericulture owing to the scarcity of rainfall in the rearing season, just the contrary of Japan proper. 317,080 "koku" of cocoons were produced in 1926 yielding 142,161 "kan" of silk. (Wild silk worms are also reared in Korea, the cocoons being mostly exported to China.

Ginseng.—Ginseng, a medical root highly valued by Chinese and Koreans, fell off in output lately owing to the ravages of injurious fungi.) An improved method of cultivation and control has revived the business.) In 1926, the monopoly goods manufactured amounted to 29,369 "kin" and besides there was 82,203 "kin" white ginseng produced outside the specified area. Korean ginseng exported to China alone is now estimated at 40,000 "kin". The plants are left growing 6 or 7 years before they are harvested. The business is a Government Monopoly.

Cotton.—The experimental cultivation of cotton started in the spring of 1905 by the Korean Cotton Planting Society organized by a number of prominent Japanese having proved satisfactory, planting was started on a systematic plan. The American upland variety is cultivated, being judged best suited to the soil and climate of the southern half of Chosen.) The second project put into execution in 1919-20 aims to increase the cotton fields to some 250,000 "cho" within ten years when the output will increase to about 192,000,000 "kin" in upland cotton and some 58,800,000 in native species. The latest figures are given below:—

	Area (1,000 cho)		Harvest 1,000 kin		Export (Yen 1,000)
	Upland	Native	Upland	Native	
1924	117	53	106,927	30,928	13,118
1925	139	59	101,225	38,959	11,859
1926	150	65	118,264	43,819	4,554

Stock-Farming.—Cattle reared in Hamkyong, Northern Korea, are famous for strong build and perfect flesh development.) Every house there keeps a head or two, and as the region is excellently suited for pasture, the preserved meat business in Northern Korea has a great future.

Tobacco.—Tobacco is an old farm produce in Korea and covers an area of about 12,000 "cho". The leaf harvest shows a marked increase owing to improvement in the method of cultivation and variety. The crop obtained recently reached 3,000,000 "kan." Leaf-tobacco has of late found a foreign market.

Fruit-Culture.—The climate being drier than in Japan proper is suited for the cultivation of fruit-trees and produces fruits of sweeter taste. Formerly fruits were largely imported into Korea from China and Japan but of late fruit-culture has sufficiently developed to meet the demand in the Peninsula.) Apples, pears, etc., are now largely exported to the homeland, Manchuria and Siberia.

Organs of Agricultural Department

A Model Farm was established at Suwon, with branches at various places. Similarly sericultural and agricultural schools were founded, and steps were taken to encourage sericulture, the cultivation of rice, cotton, etc.

MINING

The development of Korean mines, especially as regards gold, iron, graphite, tungsten, etc. is quite creditable, the value of the products having been quadrupled from ¥6 to over ¥25 millions.

Affected by the recent slump, graphite, zinc, tungsten, etc., among others, have already ceased to be operated since 1921.

Gold.—The Unsan Mine (North Pyong-an) leased by the Oriental Consolidated Mining Co. and Sulan Mine (Whang-hai) of the Kanjo Mining Co., both American interests, produce the bulk of the gold output in the Peninsula. There are, besides, Shokusan, Shojo (French Concession), Rakusan (Kobayashi), Toei (Kuhara) and Rippo (Taniguchi) gold mines now under operation. Alluvial mines are found at Shokusan and Jun-an.

Iron.—Whang-hai is the centre of iron mining in Korea. Limonite is especially active in the districts between Kenjiho and Koshu (Whang-ju) to the east. Sainei and Inritsu Mines and also those in South Pyong-an all belong to the same category. Hematite is operated at Angaku Mine (Chosen Iron Mining Co., Whang-hai), while magnetite is found all over the Peninsula, though it is still left in neglect. Sainei and Inritsu, most important of all, operated at first by the Korean Government were transferred to the Home Government in 1910. These with two other Korean mines, Angaku and Rigen, furnish the ores to the Gov't Yawata Iron Works. Penchi-hu and Wanishi Iron Foundries get their supply from Kaisen (Nippon Steel Foundry) and Rigen Mines. Mitsubishi's Kenjiho Iron Foundry runs its own mines in Korea but the shortage comes from Angaku Mine.

Coal.—The Pyong-yang Colliery (Gov't enterprise) is famous as working the only rich anthracite mine in Japanese territory. Its full working capacity has lately been increased to 300,000 tons, the bulk of the output being consumed by the Tokuyama Briquette Factory (Yamaguchi-ken) run by the Imp. Navy.) Prospecting is going on in other districts of South Pyong-an and also in Kwan-won. Lignite, though inferior in quality, is found in various places.

Principal Mineral Production (in unit of 1,000)

Year	Gold		Taka*	
	Momme	Yen	Kan	Yen
1924	1,084	4,550	1,555	1,734
1925	1,184	5,693	120	45
1926-7	1,827	7,485	267	96

Year	Iron ores		Pig-iron		Coal	
	Ton	Yen	Ton	Yen	Ton	Yen
1924	309	2,141	100	4,566	399	2,961
1925	351	2,200	102	5,386	622	4,549
1926-7	351	1,120	118	5,958	682	4,992

N.B.—* Selected quartz vein containing gold, silver and copper ores.

Other items are alluvial gold, ¥418,845; graphite, ¥353,945; gold and silver ores ¥1,063,274, etc., altogether amounting to ¥24,130,350 in 1926 against ¥30 millions in 1918.

FISHERY

Bounded by sea on three sides Korea has coast-line extending over 9,000 nautical miles and is rich in fish, shell-fish and

sea-weeds. Mackerel, sardine, Alaska pollack, *Sciaena* Sp., herring, sea-bream, cod, yellow tail, whale, ear-shell are the principal catches. The encouragement by the Government and the improved methods introduced have brought about the rapid development of the industry of late. The existing state of the business excepting whaling, is as under:—

At the end of 1926	No. of fishermen	Value of catches	Marine products
Japanese	78,896	¥27,854,601	¥14,279,882
Koreans	327,272	25,888,266	19,849,491
Total	406,168	53,742,867	34,129,373

The coast from the River Tumen downward is noted for the Myŕng-tai, Alaska pollack and cod fishing, the western sea for the Guchl, *Sciaena* Sp. fishing and the southern sea near Fusan for cod, herrings, etc.

Whaling.—Whaling is solely undertaken by Japanese. Boats numbered 12 in 1926 and the catches in 1926 totalled ¥762,163 in value.

Salt

Owing to her geographical features, Korea is suitable for salt manufacture by natural process. The output is at present hardly sufficient to meet the demand in the Peninsula, but with the completion of the expansion program extending over 7 years, 1920-1926, salt fields that totalled roughly 2,446 before came up to 4,000 "cho." The output for 1926 was 155,094,000 "kin."

FORESTRY

Except in the northern regions covering the upper courses of the Yalu and the Tumen, mountains in Korea are bare, a result of reckless felling and neglect. Areas to be properly regarded as regular wooded land roughly measure about 15,883,000 "cho", about 71% of the total area of Korea including about one third of open land.) The trees growing in the wooded zones in northern Korea are *chamaecyparis*, *larix*, *abies*, *birch*, *pinus*, etc. In preserved forests here and there found in southern Korea are growing *pinus*, *quercus*, *zelkova*, *walnut-trees*, etc. The greatest obstacle in regard to tree-planting in Korea is scarcity of fuel and absence on the part of the people of the idea of preserving young trees, a result of centuries of oppression and extortion. In 1907 the Residency-General set about the task of effecting a thorough renovation of this state of affairs; established nurseries for raising seedlings to be distributed gratis; created an Arbor Day on a national holiday (April 3), and effected planting over 361,000 "cho," or 115 times as great as the figure at the time of the annexation in 1910.

The Government-General's Forest Office established in 1907 at New Wiju has under its control about 2,200,000 "cho" of forests along the Yalu and Tumen Rivers and is chiefly devoted to lumbering work.

INDUSTRIES AND WAGES

The Koreans are a deft race and their mats and similar wares are by no means despicable. As investigated by the responsible

authorities, (the industries that offer bright prospect in the Peninsula are fabrics, spinning, paper, ceramics, hides and leathers, tobacco, liquors, bamboo-work, metal work, and knit-work. Preserved meat, especially beef, fancy matting and chemicals from sea-weeds are also promising. A rapid growth has been witnessed in the textile industry with the introduction of improved machinery. The production in all lines of industry has made rapid strides of late, the value exceeding ¥295 millions in 1925.

To encourage industry the Government has established a printing office, a higher technical school, technical training schools, brick factory, etc. The last is regarded as especially important, not merely because it is full of promise owing to abundance of clay everywhere but chiefly because the natives, who are dwelling in wretched hovels inductive of indolent habits, should be encouraged to rebuild them with brick, wood being scarce and costly.

The following data taken from the official reports show the development of manufacturing industry in recent years.

	No. factories	Capital (Yen 1,000)	No. workers	Motive power		Value mfrs (Yen 1,000)
				motors	H.P.	
1923 ...	3,499	177,986	69,412 (59,678)	1,670	90,008	242,788
1924 ...	3,845	166,941	73,184 (63,488)	1,972	98,412	293,947
1925 ...	4,238	265,853	80,375 (70,281)	2,370	123,949	337,249
1926 ...	4,293	319,171	83,450 (73,345)	2,576	128,730	365,849

* Figures in brackets show Koreans.

Industries Started by Japanese.—These have made a rapid development of late, the investment reaching about ¥270 millions in 1926 and comprise chiefly rice-cleaning, ironworks, tobacco, bricks and tiles, electric enterprise, lumbering, brewing, and tanning. The total production is about ¥229 million worth.

Electric Enterprise.—At the end of March 1927, 72 electric companies existed with capital of ¥196,053,500.) The Seoul Electric Co. is the largest and commands a capital of ¥15,000,000. It undertakes lighting, electric car business and supply of current.

Chosen Water Power Elec. Co.—A new electric enterprise projected by the Chosen Hydro-Electricity Co. (capital ¥20 millions) aims at generating 180,000 kilowatt electricity by utilising water power of the river Pu-jyol-lyong-gang in south Hamgyong province to supply power for industrial purposes. The first period work of 50,000 kilowatt is to be completed in 1928 when the co. will inaugurate its business, the remaining work to be finished in 1931. The transmission power is 110,000 volt, the length of transmission lines extending about 38 miles. The estimated cost is ¥45 millions.

Wages in Korea

Wages of native laborers are about half of the figures in Japan proper. Data showing average of daily wages (at Seoul) for the year 1927 are as follows:—

Occupation	Japanese Yen	Korean Yen	Occupation	Japanese Yen	Korean Yen
Carpenter	3.61	2.00	Coolie	2.33	1.01
Plasterer	3.95	2.29	Compositor ..	2.50	1.46
Stone mason..	4.16	2.18	Shoemaker ..	2.69	2.15
Blacksmith ..	3.50	2.25	Tailor	3.21	—
Thatcher	3.68	2.03	Laundryman..	—	1.00
Rikishaman ..	2.78	2.21	Barber	2.12	1.42

EDUCATION

Korea had no system of modern education before she was brought under Japanese protection, for only about 10% children of school-age, and only those of upper classes attended schools kept by Korean teachers who at best possessed knowledge of Chinese classics. All other children were left uneducated.

The Korean educational ordinance and regulations put in force in Nov. 1911, and revised in Feb. 1922 place Ordinary and Higher Common Schools for Korean boys and girls in the same status as elementary and secondary (i.e. Middle and Girls' High) schools. The secondary schools and those of higher grade for imparting knowledge of agriculture, commerce, engineering, teaching, medicine, laws, economics, etc. are controlled in practice by the regulations thereof operative in Japan proper. Both Japanese and Korean students are co-educated in these schools. The data in May 1927, are as follows:—

		No. of schools	Staff	Enrolment	
				Boys	Girls
Elementary Schools		455	1,912	30,887	27,688
Common Schools.....	Public	1,338	8,111	366,181	63,165
Middle Schools.....	Public	11	264	5,528	
High. Common Sch.	Public	15	337	6,386	
	Private	9	197	4,826	
Girls' High Schools	Public	22	305	7,089	
Girls' High. Com. Sch.	Public	6	72	1,175	
	Private	9	126	2,069	
		No. of schools	Staff	Enrolment	
Agricultural Schools..	Public	23	218	4,033	
Commercial Schools..	Public	16	334	4,407	
	Private	4	59	1,073	
Technical School (Gov't).....		1	28	144	
Fishery Schools (Public).....		4	31	250	
Continuation Schools (Public).....		46	228	2,493	
Normal Schools.....	Gov't	1	51	761	
	Public	13	164	1,947	
Gov't Schools of Higher Grade:					
Seoul Law School.....		1	15	179	
Seoul Medical School.....		1	66	345	
Seoul Tech. School.....		1	53	167	
Sui-gen Agr. and Forestry School		1	35	170	
Seoul Higher Commercial School		1	42	230	

Besides there were five private special schools managed

by Koreans or foreign missionaries and 583 private schools (enrolment 57,120) of lower status including 245 religious institutions. Private elementary schools of the old system mostly teaching only writing and reading number 18,510 and take in about 231,754 children.

Korean Students studying in Japan proper.—These Koreans increase year after year in number. In Dec. 1926, there was 81 studying at official expenses.

Seoul Imperial University

As the highest seat of learning in Korea the institution was established in May '23 under Imperial Ordinance and in accordance with the Imperial University Ordinance. It is to consist of Law and Literature Departments, with two year Preparatory course attached. The latter was opened in April '24 (Vid. Chap. on Education).

RELIGION

All religious faiths enjoy equal opportunity and protection from the Government, there being no State religion in Korea. The Confucian cult is spread more among the higher classes, and Buddhism among the lower. The latter, however, is not so prosperous as in Japan proper. Standing between the two Christianity has gained a great vogue among all classes.

There are also some adherents of such Shinto sects as Tenrikyo, Konkokyo, etc. In December 1926 Shinto shrines and Buddhist temples established by Japanese numbered 43 and 87 respectively. Besides there existed 1,363 Buddhist temples under Korean management with 7,188 priests and nuns. Other figures for the same period are as follows:—

	Missions	Missionaries	Adherents
Shinto	158	236	85,204
Buddhists	351	609	366,287
Christians	3,664	2,393	299,564

* Including churches.

JUDICATURE

The Korean Courts fall under the direct control of the Governor-General and hear both civil and criminal cases. They also attend to other legal affairs in Korea. The courts comprise 11 District Courts with 51 branches, three Courts of Appeal, and one Supreme Court.

The District Courts transact the respective legal work as provided in the laws for organization of law courts. The Courts of Appeal give judgment on appeals and protests brought against the decisions of the District Courts, and the Supreme Court decides the appeals against judgment given at the second trial of the Appeal Courts, and the protests against the judgment of the Appeal Courts.

Latest statistics on new cases of civil and criminal preliminary affairs etc. are as follows:—

Year	Civil suits	Criminal suits	Preliminary	Pro'ratons' visit
1924	60,833	23,505	864	83,056
1925	64,244	27,532	840	91,222
1926	67,075	31,295	850	96,198

There are 17 prisons with 13 branches, their inmates at the year end being classified as follows:—

		Male	Female	Total
1924 {	Japanese	554	12	566
	Koreans	11,744	385	12,129
	Foreigners	134	4	138
1925 {	Japanese	577	11	588
	Koreans	11,970	402	12,372
	Foreigners	153	6	159
1926 {	Japanese	679	9	688
	Koreans	12,642	493	13,135
	Foreigners	151	7	158

GARRISON AND POLICE

The troops in the Peninsula represent two Divisions, one being quartered at Pingyang and the other at Ryusan near Seoul, besides the 6th Air Regiment established in 1921-22. Prior to the "Independence" agitation the policing force consisted of gendarmes and police. With the reorganization of the administrative system in 1919 the gendarmes were mostly converted into police at their own option. (The police force proper comprised at the end of December 1926 7,333 native policemen, and 11,129 Japanese policemen, these with others making the total of 18,462. The gendarmes are now on their own proper duty only.

RAILWAY

The Seoul-Fusan section was completed in 1904 by the former Seoul-Fusan Railway Co., and opened to traffic in Jan. 1905. The Seoul-Jinsen route was originally conceded to an American, from whom the former Seoul-Jinsen R'y Co. bought the privilege and completed the construction in 1909. Amalgamated in 1903 with the larger company, the whole was purchased by the Government on 1st July, '06. The prolongation from Seoul to the Yalu and the construction of two branches to Masan and Kenji-ho were hurriedly made during the Russo-Japanese war.

As existing at present the Korean railways reach 1,300 miles in extension consisting of 4 main lines as follows:—(1) The trans-Peninsular line extending from Fusan to Antung (590.8 m.), with branches of 103.8 m., connecting on one hand with the Fusan-Shimonoseki ferry service of the Japanese Gov't Railways and on the other with the Antung-Mukden line of the South Manchuria Railway. This trans-Peninsular line, therefore, forms part of the two international through traffic services, i.e. one between Japan and Europe via Siberia and the other between Japan and China via the South Manchuria Line. (2) Seoul-Wonsan Line (138.4 m.); (3) Honan Line (176.5 m.), or Taiden-Mokpo main line and Kunsan branch, and (4) Wonsan-Huining Line (388.4),

This last was completed and its last section opened in October 1928, so that when the projected Kirin-Huining line is completed the Wonsan-Huining line will be connected with Changchun of the South Manchuria Railway. For purposes of industrial and commercial developments, as also of defence of Chosen the Wonsan-Huining line is judged to be of inestimable importance.

The Korean railway is of standard gauge of 4.8½ ft.

Traffic Results

The total investment in the Chosen Government Railways amounts to ¥294,409,832 at the end of March, 1927.

Traffic results are shown below in 1,000:—

Year ended Mar.	Passengers	Luggage (kin)	Goods (ton)	Receipts (Yen)
1924	17,488	54,601	3,794	29,028
1925	18,241	54,547	4,297	30,709
1926	18,457	54,226	5,027	33,810

The average figures per mile per day are:—

	Passengers	Goods (ton)	Receipts (Yen)
1924	1,255	1,211	64.10
1925	1,243	1,229	64.52
1926	1,310	1,416	70.18

Private Lines

Eight private lines exist, some of them electric but all of light railway description.) Their proposed length totals roughly 1,707.9 miles but in March 1927 the lines open extended only 530.8 miles. All these private undertakings have been started under the Private Railway Encouragement Law and are guaranteed 8% profit for a certain time.

THE ORIENTAL DEVELOPMENT COMPANY

The first joint undertaking by Japanese and Koreans to exploit the resources of Korea, it was organized in the spring of 1908. The capital was ¥10,000,000, increased in 1919 to ¥50,000,000, divided into 1,000,000 shares of ¥50 of which ¥35 is paid up. Company's line of business comprises opening up of wild land and making loans to Japanese settlers and Koreans redeemable in 5-25 years, and also temporary loans both to Japanese and Koreans. It is allowed to finance enterprises in Manchuria. The term of the Company is 100 years. The Company is authorized to issue debentures up to ten times its paid up capital. The issue amounted by Mar., 1926 to ¥279,000,000 (of which ¥115,900,000 redeemed) including 50,000,000 francs (redeemed) of the French loan and about \$19,900,000 of the American loan. President and two Vice-Presidents are nominated by the Japanese Government, one Vice-President to be Korean.

Inviting Settlers.—The Company's settlement plan now in force divides settlers into two classes. The first can lease wet and dry fields to the extent of two "cho" (five acres) per family,

the ownership of which is to be transferred to them after repaying price of land in 25 or less yearly instalments at the interest of 6% per annum, no redemption being required for the first five years. It is necessary to cultivate the whole leased lot. The second can lease five "cho" by paying not less than one quarter of the price. The ownership is transferable to them after repaying the balance in 25 or less yearly instalments at the interest of 7% per annum. If they are willing to cultivate only part of the land themselves, they can put out the rest to lease.

Statistics for the last few years are given below:—

March	Cap. p.a. (Yen 1,000)	Reserves (Yen 1,000)	Profit (Yen 1,000)	Loss (Yen 1,000)	Net profit (Yen 1,000)	Dividend (per cent)
1925 ...	35,000	5,677	23,926	20,570	3,356	8
1926 ...	35,000	5,979	23,483	19,844	3,639	8
1927 ...	35,000	750	33,392	38,937	-5,545	—

Land Owned

	1925-26		1926-27	
	Area (cho)	Value (Yen 1,000)	Area (cho)	Value (Yen 1,000)
Paddy	49,647	—	48,983	—
Upland	20,233	—	18,619	—
Forests	—	—	2,477	—
Total incl. others	86,956	—	90,243	—

Settlers

March	Family	Population	Allotted area (cho)	Loans advanced (Yen)
1925	3,956	17,802	8,535	471,026
1926	4,056	18,990	9,891	—
1927 (Sept.) ..	4,020	19,285	9,287	503,087

Pres., K. Watanabe. Directors: R. Ikebe, K. Ozaki, M. Numada.
Auditors: T. Shima, M. Fukumoto, Cho Cintal.

CHAPTER XXXVIII

TAIWAN (FORMOSA)

INTRODUCTORY REMARKS

Taiwan consists of Taiwan proper, the Hokoto islands (Pescadores), and smaller islands lying near the coast. The main island covers 13155.71 sq. miles and extends from latitude $21^{\circ} 45'$ N. to $25^{\circ} 38'$ N. and from longitude $119^{\circ} 18'$ E. to $122^{\circ} 6'$ E. The Pescadores cover about 47.64 sq. miles. The total area of Taiwan almost equals that of Kyushu in Japan proper.

The main island is traversed from north to south by the Taiwan Range that forms the backbone of the island, dividing it into two parts, east and west. The eastern half is exceedingly steep and craggy, while the other is a flat and fertile slope. Among the mountains the most conspicuous are Mt. Sylvia (nearly 13,000 ft.) and Mt. Nittaka (14,500 ft.). In the northern part of the island the volcanic peak Dalton (3,630 ft.) stands, its neighborhood abounding in hot springs. The rivers of Formosa are not large, but their currents are very swift. Every year in late summer heavy rainfalls are frequent, causing floods that inflict heavy damage on the fields and public works. The seaboard extends nearly 707.69 miles, but with no good indentation except Keelung and Tamsui in the north and Takao in the south-west. The western part of the island is generally well cultivated, yielding two rice crops a year. The best land is in the south-west, but even in the mountainous districts a great part of available plains has been brought under cultivation.

The island being situated in the Tropic of Cancer the temperature rarely falls below 96° F. In winter the north-eastern monsoon prevails and occasions wet weather in the northern part of the island. On the other hand the southern half is visited by the south-western monsoon and its rainy season is in summer.

METEOROLOGICAL OBSERVATIONS

Temperature (1926)

	Jan.	Apr.	Jul.	Oct.	Dec.	Av.	Max.	Min.
	c.	c.	c.	c.	c.	c.	c.	c.
Taihoku	15.0	18.9	28.9	22.3	15.7	21.5	37.2	2.8
Taichu	15.4	21.0	28.2	23.7	16.4	22.2	35.8	1.8
Tainan	16.8	22.4	28.1	24.2	17.6	22.9	34.8	4.3
Taito	18.3	21.5	27.5	24.2	19.6	23.1	36.0	10.2
Koshun	19.7	23.1	27.7	25.1	20.9	24.2	34.0	10.0
Hokoto	16.7	21.6	28.7	24.5	17.9	22.8	33.4	10.3

Rainfall (1926)

	Jan. mm.	Apr. mm.	Jul. mm.	Oct. mm.	Dec. mm.	Total mm.	Max* mm.
Taihoku	32.0	426.3	170.9	303.1	49.3	2,103.1	198.7
Taichu	5.4	418.8	238.7	5.5	36.4	1,611.4	133.8
Tainan	0.1	164.8	135.0	12.6	11.1	1,500.9	172.9
Taito	26.5	92.8	212.5	296.3	6.8	1,805.0	157.2
Koshun	19.3	129.9	421.2	106.8	7.6	1,633.8	185.5
Hokoto	2.2	200.9	96.0	6.2	6.6	1,034.1	123.4

* maximum per 24 hours.

Number of Days of Rainfall

	1921	1922	1923	1924	1925	1926
Taihoku	170	200	152	194	164	182
Taichu	131	160	95	141	116	129
Tainan	162	114	81	129	95	108
Taito	158	164	150	162	159	153
Koshun	157	157	154	165	135	147
Hokoto	85	104	75	126	87	99

POPULATION

		Male	Female	Total
1924	Japanese	101,080	82,273	183,317
	Natives	1,913,699	1,828,417	3,742,116
	Aborigines	42,650	42,346	84,996
	Foreigners	23,404	7,869	31,273
	Total	2,080,833	1,960,869	4,041,702
1925	Japanese	101,993	87,637	189,630
	Natives	1,962,069	1,876,567	3,838,636
	Aborigines	43,177	42,761	85,938
	Foreigners	23,857	9,401	33,258
	Total	2,131,096	2,016,366	4,147,462
1926	Japanese	105,143	90,626	195,769
	Natives	2,002,787	1,920,965	3,923,752
	Aborigines	43,658	43,075	86,733
	Foreigners	25,068	10,437	35,505
	Total	2,176,656	2,065,103	4,241,759

In the following statistics, aborigines are excluded.

Year	Birth	Death	Marriage	Divorce
1922	161,829	95,372	37,831	4,125
1923	154,079	94,108	39,480	4,338
1924	166,183	98,405	42,101	4,457
1925	166,901	98,043	37,603	4,066
1926	183,360	93,720	46,778	4,812

Year	Per 1,000 of population				Males per 100 females born	Death per 100 births
	Birth	Death	Marriage	Divorce		
1922 ..	42.30	25.00	9.90	1.10	104.61	49.74
1923 ..	39.60	21.60	10.10	1.10	104.88	95.55
1924 ..	42.00	24.87	10.60	1.10	105.79	59.21
1925 ..	41.09	24.14	9.26	1.00	105.11	58.74
1926 ..	44.13	22.56	11.26	1.16	104.95	51.11

Principal Cities at the End of 1926

Taihoku	205,613	Kako	33,083
Keelung	68,649	Tainan	87,930
Tamsui	22,606	Kagi	47,894
Giran	22,613	Takao	46,754
Shinchiku	39,685	Mako	21,456
Taichu	44,104	Toroku	27,911

DEFENCE

The defence of Taiwan is in charge of either a full or Lieut.-General under direct control of the Emperor. As regards military administration, personnel, mobilization, etc. the Commander is subject to the control of the Minister of War, the Chief of Staff, etc. The forces under his command consist of a fortress at both Keelung and Hoko-to where a battalion of heavy artillery is stationed, a garrison at both Taihoku and Tainan each with one regiment of infantry and a squadron of mountain battery.

THE ABORIGINES

There are nine different tribes, ethnologically all more or less allied to the Malay race. These tribes are divided into about 715 communities with a population of about 130,400 and broadly classified into Northern and Southern aborigines. The former are savage head-hunters, the latter more submissive and civilized. The Northern aborigines almost exclusively belong to the Alaiyol tribe and occupy a little under half the whole extent of the unexplored regions. The Southern tribes are Tsaissetto, Vonum, Tsco, Tsarien, Taiwan, Puyuma, Amis, Peipo and Yami (this on Botel Tobago island alone), and they are about four times as numerous as the other. These together occupy regions covering about one half the total area of the island, where natural resources abound.

The Frontier Guard Zone.—For guarding the frontier in order to prevent the descent of savages upon the plains, the system of volunteers organized formerly by the Chinese Gov. has been kept up on a larger scale by the new ruler. The zone extends over 360 miles of which roughly 230 are strengthened with charged barbed wire. Some 9 batteries are placed at strategic positions. On the other hand 27 public schools exist in the reclaimed aborigines' districts.

Subjugation Program.—From 1910 to 1914 the Government carried out a thorough subjugation program.) The first campaign in 1910 against the Southern Gorgan tribe, the 2nd against the Middle tribe Moricowan in 1911; the 3rd in '13 against the Northern tribe of Kinalji, and the 4th and last attempt in 1914 to bring to subjection the Tarco tribe, the head-hunting savages occupying a hilly and inaccessible region on the eastern coast.

THE NEW LOCAL ADMINISTRATION

Except in the two eastern districts which are most backward in civilization and communications the new system of local

administration was introduced in Aug. 1920 with the creation of 5 prefectures, Taihoku, Shinchiku, Talchu, Tainan, and Takao, much on the same lines as in Japan proper, each under a civil governor, and with it the municipal and village self-government has come into existence. The prefecture, municipality, and village conduct their respective affairs regarding taxation, revenue, management of enterprises, etc., as assigned each by the new legislation. Advisory councils, prefectural, municipal and village, have also been created to deliberate on the financial and legislative affairs, taxation, etc. in their respective commissions. The members of the prefectural council are appointed by the Governor-General, the municipal and village members by the governor of the prefecture to which they belong in turn, each for a term of two years and for no pay. The new legislation came into force in Sept. 1920.

REVENUE AND EXPENDITURE

for 1926-27 (actual account) & 1927-28 (estimate)

Revenue (¥1,000)		
	1926-27	1927-28
Ordinary:—		
Taxes & Duties.....	21,912	16,847
State Undertakings and Property.....	70,645	72,522
Stamp Receipts	3,024	2,338
Miscellaneous Receipts	1,008	865
Total	96,588	92,573
Extraordinary:—		
Proceeds from Sale of State Property...	530	449
Receipts from Loans.....	2,821	5,000
Miscellaneous Receipts	118	—
Surplus of preceding year transferred...	31,798	12,715
Grants from general account.....	—	—
Borrowings for undertakings.....	—	—
Total	35,190	19,026
Total Revenue	131,778	111,599
Expenditure (¥1,000)		
	1926-27	1927-28
Ordinary:—		
Administration Office	2,127	2,204
Local Governments	13,470	13,599
Custom-houses	466	477
Judicial Courts	1,006	1,067
Prisons	1,045	1,128
Police	188	189
Hospitals	1,067	1,070
Research Institute	922	966
Education	2,980	3,374
Communication	13,906	16,028
Monopoly Bureau	23,675	27,678
Forestry	3,083	3,343
Transferred to Special Account.....	4,581	4,972
Total incl. others.....	69,658	79,167
Extraordinary:—		
Government undertakings	9,544	18,539

Encouragement of Industry.....	1,347	1,532
Subsidies	4,756	6,966
Total incl. others.....	22,283	32,432
Total Expenditure	91,941	111,599

EDUCATION (March, 1926)

	No. of Schools	No. of Teachers	No. of Students
Elementary Schools	132	780	25,895
Public Schools	539	5,154	216,011
Middle Schools	9	178	3,964
Girls' High Schools	11	176	4,194
Normal Schools	3	88	1,187
High School	1	26	411
Agriculture and Forestry Schools....	2	21	324
Business Schools	2	35	717
Technical School	1	56	109
Higher Commercial Schools.....	2	29	290
Medical School	1	38	291
Higher Agr. and For. School.....	1	28	118
Private Schools	17	103	2,485
Family institutions kept by native teachers	136	208	5,507

By the regulations promulgated in 1922 both Japanese and natives are now placed under a uniform system of education. In the primary grade, however, the native children mostly attend the public schools which formerly admitted only natives to teach them Japanese.) In the above table the public schools include those for aborigines.

With the creation of the normal schools in 1919 the Language School, which consisted of two departments, Japanese and native, was abolished. The High School established in April 1922 is under the same regulation as that in Japan proper.

JUSTICE

The judicial system formerly consisted of two stages, but by the revision effected in 1919 a higher stage has been added. Thus the law courts as they exist now are the High Court, with the two Departments of Final Appeal and Revision, and three Local Courts with three branches.

	Dec.	Civil cases			Criminal cases		
		No. of cases	No. disposed	No. remaining	No. of cases	No. disposed	No. remaining
1st instance	{ 1925 ...	10,499	7,789	2,710	4,236	4,130	106
	{ 1926 ...	10,511	7,933	2,578	4,302	4,077	225
2nd "	{ 1925 ...	1,454	1,119	335	573	538	35
	{ 1926 ...	1,435	1,118	317	543	507	36
3rd "	{ 1925 ...	245	206	39	154	65	31
	{ 1926 ...	279	238	41	139	113	26

There are 3 prisons with 3 branches, the inmates numbering 3,254 at the end of 1926, consisting of 215 Japanese, 2,942 natives and 97 Chinese.

FORESTRY

The forest area is roughly put at 8,000,000 "ko" (1 "ko"=2.4 acres), including wasteland that occupies 80% of the total area. More than one half of it is in the aborigines' district, which is noted for vast primeval forests. Reckless felling has devastated the other half. (So the authorities have instituted protection forests and are encouraging reafforestation.

Area of Afforestation ("Ko"=about 1 "cho")

Year	Government		Private		Total
	Camphor trees	Other trees	Camphor trees	Other trees	
1924	701	937	799	6,815	9,252
1925	526	998	852	9,834	10,858
1926	—	965	704	7,813	9,482

Lumbering Work—Arisan

Several lumbering enterprises have already been started, principally for utilizing the dense "hinoki" (*Chamaecyparis obtusa*) forests that exist here and there.

Arisan is a chain of hills rising 2,800 to 3,700 ft. above the sea-level and stands east of Kagi city. It is sheltered on the east by Mt. Nittaka. Arisan proper extends 15 miles from E. to W. and 20 from N. to S. and covers 27,742 acres. The contents of Arisan are estimated as follows:—

Conifers, 374,230 stamps, yielding 10,606,448 "koku" (1 koku=10 c.f.)
Broad-leaf trees, 1,112,186 yielding 11,242,381 "koku".

As the Government utilization program is to fell every year from 1915-'16 year 250,000 "shakujime" (12 cu. ft.) of conifers and 100,000 for the others, their supply is to last 25 and 186 years respectively. By properly filling up the space of felling, supply may be kept up permanently. In 1924, 182,910 "koku" was turned out.

Lumbering rails are running for 41 miles from Kagi to Nimampel, on the slope of Arisan, the work being completed by the Government-General in Jan., '13 at the cost of ¥4,900,000, after the failure of the Fujita Firm which undertook the work but gave it up after laying only 9 miles. The gauge is 30 in. with a maximum slope of 1 in 20. Along the line 68 tunnels exist and also three spiral sections and two switchbacks. The conversion work is done at Kagi where an extensive saw yard has been constructed.

The Hassenzan.—The mountain, 7,824 ft. above the sea-level and lying east of Taichu, harbors a primeval forest. The area to be exploited covers 14,000 "cho" and its connected with the main traversing railway by a light line. It contains 4,476,000 "koku" of conifers and 5,764,000 "koku" of broad leaf trees. The lumbering work was started in 1915. In 1924, 30,104 "koku" was turned out.

The Dakusui Valley in Giran.—The forest area covers 60,000 "cho" and is estimated to contain twice as great a sylvan richness as Arisan, producing in 1924, 81,380 "koku." The trouble is that the area is still infested by head-hunters.

AGRICULTURE

As referred to in the introductory remarks of this chapter, the low land of Formosa is fertile and yields two crops of rice a year, though of inferior quality. The improved system of irrigation and manuring recently effected by the Government has done much to raise the quality and to increase the production. The total output of cereal, including upland variety, reaches now over six million "koku," of which about 15% goes to Japan proper. The sweet potato is important as a staple article of food for natives, and is grown all the year round. It is also exported as material for alcohol, etc. Other staples in the island are sugar-cane, tea, ramie, jute, indigo, etc.

Area of Cultivation (in 1,000 "ko")

Dec.		Real area		Area of plantation				
		Paddy	Upland	Rice	Sweet potato	Beans, etc.	Sugar cane	Ground nuts
1924	.....	380	405	547	124	24	123	26
1925	.....	385	414	567	127	25	130	26
1926	.....	393	420	584	128	25	123	27

Principal Crops (in 1,000)

Dec.	Rice (koku)	Ground nuts (koku)	Sweet potato (kin)	Beans, peas, etc. (koku)	Jute (kin)	Ramie (kin)
1924	.... 6,077	413	1,867,168	96	5,996	2,148
1925	.... 6,443	428	1,908,915	92	5,942	2,110
1926	.... 6,214	454	1,931,848	87	6,144	2,118

Fruits (in 1,000 "kin": *represents number)

Dec.	Oranges	Longan	Banana	Pine-apple*
1924	..... 21,245	11,100	291,952	10,997
1925	..... 23,622	16,916	267,642	14,228
1926	..... 24,097	7,882	277,970	16,052

Live Stock (No. in 1,000)

Dec.	Buffalo	Cattle	Swine	Goats
1924	..... 287	92	1,341	104
1925	..... 287	88	1,436	98
1926	..... 289	87	1,542	89

FISHERY AND MARINE PRODUCTS

The fishing industry, long left in a backward state, has recently made a marked improvement under official encouragement. At the end of 1926 there were 127,115 fishermen and 52,242 engaged in pisciculture. The fishing vessels represented 543 motor boats, 3,799 wooden boats and 6,565 bamboo rafts. The area of breeding grounds totalled 26,474 "ko."

Value of Catches and Products (¥1,000)

Dec.	Catches				Marine products	Aquiculture
	Fish	Shellfish	Seaweed	Total		
1924	7,999	1,140	54	9,193	3,420	3,032
1925	8,629	1,292	110	10,031	3,581	3,167
1926	8,942	1,240	43	10,226	2,823	3,326

MINING

The important minerals in the island comprise gold, silver, alluvial gold, copper, coal, petroleum, sulphur and phosphorus, mostly produced in the northeastern districts of the island. The principal mineral fields measure as follows, in unit 1,000 "tsubo."

Dec.	Gold	Gold-copper	Alluvial gold	Copper	Coal	Petroleum
1924	2,433	3,400	1,606	8,620	196,614	25,243
1925	2,810	3,400	1,176	6,820	172,153	25,482
1926	—	3,400	1,335	6,437	159,567	24,947

The business is carried on by Japanese, except in case of coal and alluvial gold, in both of which the natives are allowed one half the share of output. The production in the last few years is as follows (¥1,000):—

Year	Gold	Alluvial gold	Gold-copper	Copper	Coal	Petroleum
1924	380	5	818	131	11,645	284
1925	370	5	579	61	12,999	278
1926	417	10	1,121	261	13,300	1,103

The principal mines are Kinkwaseki, Zuiho, Shikyakuten and Denryoku, all situated near Keelung. The first two produce gold and silver, the other two coal; copper is found also at Kinkwaseki. (Development of coal mining is a recent feature. Its export in 1926 reached ¥8,437,000. Petroleum is still in the prospecting stage.)

SUGAR INDUSTRY

When the island was ceded to Japan by China in 1895, the new rulers found the industry in a highly neglected state. After various experiments, they decided to introduce Rose Buds variety. In 1902 they placed the industry under their control, promulgating regulations for the encouragement both in the cultivation of canes and the process of refining. By 1923 the subsidy granted totalled ¥12,418,200. The area of plantations under cane increased from 26,670 "ko" in 1902 to 133,007 "ko" in 1924, while the refineries with the latest equipment, of which there was only one with the capital of ¥3 millions in the former year, numbered 44 in the latter year run by 13 companies backed by an aggregate capital of ¥168 millions. The output too grew from 90,000,000 "kin" to over 739,000,000 "kin" in the same space of time. The recent data are given below:—

Year ended June	Harvest area ("ko")	Total yield (1,000 kin)	Of which used for sugar (1,000 kin)
1924	123,233	7,793,688	7,278,355
1925	130,372	8,839,833	8,196,518
1926	123,952	8,610,114	7,978,100

The output of sugar makes the following record (in 1000 "kin") :—

Year ended Oct.	Coarse man'ture	Raw	Refined	Molasses
1924	—	40,284	38,069	2,021
1925	—	45,364	42,891	2,053
1926	—	51,190	48,731	2,734

Production at the Modern-style Refineries (1000 "Kin")

Refining Cos.	Year ended Oct.		Refining Cos.	Year ended Oct.	
	1925	1926		1925	1926
Teikoku	74,315	90,108	Taiwan	188,817	206,322
Niitaka	48,721	52,655	Tainan	7,904	14,402
Rin-Hongen ...	23,798	26,068	Shinko	11,936	8,954
Toyo	100,769	104,825	Taito	3,962	3,351
Meiji	113,870	115,539	Shinchiku	6,063	4,277
Dai-Nippon	97,564	86,639	Saroku	5,034	4,836
Ensuike	39,500	93,349	Total	778,774	811,344

Formosa v. Java.—Though the progress made recently has been marked, Formosa is still far behind Java in essential particulars. For instance, the yield of canes and of centrifugals is about three times per same area in Java, about 1,500 piculs against 450 of Formosa, though the percentage of centrifugals is nearly the same. The fact is the Javanese canefields are better irrigated and left in fallow systematically, while in Formosa the productive capacity is too frequently abused and irrigation is defective. Wages are only 23 or 24 "sen" in Java against 40 in Formosa, though the former is less efficient. On the other hand, Formosa has the advantage of improved plants and the protective tariff of ¥3.95 per picul. (Vide Chap. Industry).

TEA

As a beverage possessing a specially high flavor, Oolong tea is a great favorite in and about Boston and New York, about 13,000,000 "kin" valued at ¥5,700,000 being consumed there. It also goes to England where it is used to improve the flavor of black tea. The Oolong is admittedly superior in quality to black tea, and there is a good hope of its consumption abroad being increased when the taste of foreigners for tea becomes more refined. (At present the yearly production amounts nearly to 18,000,000 "kin" and forms one of the principal items of export, the annual shipment approximating 17 million "kin" valued at about ¥10 millions.

The Mitsui Firm has obtained a lease of about 50,000 acres in an aborigines district about 30 miles east of Taihoku. Some 5,000 acres of the hill sides will be converted into tea plantations. Already about a quarter has received planting, the whole area to be planted in a few years. Amount of tea product is shown below:—

Year	Coarse		Refined	
	Quantity (1,000 "kin")	Value (Yen 1,000)	Quantity (1,000 "kin")	Value (Yen 1,000)
1924	20,627	6,524	16,678	10,501
1925	20,094	7,242	16,950	11,773
1926	19,895	7,542	17,585	12,681

STATE MONOPOLY

Opium.—The State monopolies adopted in Formosa are opium, salt, camphor and tobacco, the first more from the idea of suppressing the pernicious custom of opium-smoking than for revenue purposes. As the result of the policy of gradual prohibition, brought into force in 1896, the number of licensed opium smokers had decreased to 34,359 by the end of 1926 against 169,064 in 1900. The amount of the drug sold decreased from ¥6 millions in 1921 to ¥4 millions in 1926.

Salt.—The present system was started in 1899 to encourage the industry which had degenerated as the result of Japan's policy of free manufacture. The total area of salt-fields is now over 2,313 "ko" with the output for 1926 amounting to 231,031,495 "kin."

Camphor.—This monopoly was instituted in 1899 to protect the industry from decline due to reckless felling of the trees and deterioration of quality. Under government control the manufacture of camphor and camphor oil were allowed to 23 licensees until 1919, when they were unified into the Formosan Camphor Mfg Co. established in the same year for the purpose. Remaking of the chemical is undertaken by both government and licensed manufacturers.

The demand for camphor was formerly insignificant as its use was confined for making merely insecticide, antiseptic, drugs and, in India, for incense. But owing to the rapid development of celluloid industry in Europe and America the world's consumption swelled from 5 million "kin" at the time of the inception of the monopoly, to 12 millions recently. The greater part of the quantity is supplied by the Island. In view of the gradual decrease of camphor woods the work of afforestation has been carried on since 1900 and at the end of 1923 the total planted area covered 31,963 "cho." The output and sale for the past few years are as follows:—

Year	Output (1,000 "kin")			Sale by Gov't Yen 1,000)	
	Camphor	Cam. oil	Total	Camphor	Cam. oil
1923	2,428	10,509	10,788	10,799	2,425
1924	1,966	3,992	5,988	8,280	2,556
1925	1,809	3,733	5,542	8,778	2,962

Tobacco.—The monopoly was established in 1905 and though the climate is highly favorable for its growth, the output is still insufficient. It cannot even meet the demand in the island, so that the balance comes from Japan proper and from China.

The species cultivated in the island at present is the Chinese, the yellow and the cigar tobacco. The total amount of crop as collected by the government in 1926 was 1,664,886 "kin," valued at ¥603,626.

TRADE

Trade with Japan Proper (Yen 1,000)					Trade with Foreign Countries (Yen 1,000)				
Year	Commodities		Specie & bullion		Year	Commodities		Specie & bullion	
	Exports	Imports	Exp.	Imp.		Exports	Imports	Exp.	Imp.
1922	..127,301	82,173	670	500	1922	.. 30,568	36,922	—	—
1923	..169,442	71,018	416	150	1923	.. 29,152	39,111	—	—
1924	..211,098	86,573	131	282	1924	.. 42,575	46,424	—	—
1925	..215,248	129,906	—	—	1925	.. 47,965	56,489	—	—
1926	..202,109	121,405	—	—	1926	.. 49,323	62,008	—	30
1927	..201,078	121,108	—	—	1927	.. 44,598	65,561	—	3

Chief Exports (¥1,000)

Year	Tea	Fruit	Sugar	Cumpher	Flax, hemp & jute	Coal
1923	10,007	499	2,230	3,305	364	5,695
1924	10,309	11,816	6,188	7,526	—	8,059
1925	11,702	—	6,139	5,786	—	7,444
1926	12,380	751	3,558	2,010	503	8,437

Chief Imports (¥1,000)

Year	Opium	Petroleum	Tobacco-leaf	Beans and pulse	Straw matting	Iron manufactures
1923	1,520	1,359	400	2,578	1,880	726
1924	—	1,433	955	2,572	—	4,896
1925	2,816	1,307	811	3,324	—	2,274
1926	987	1,107	754	3,657	—	746

Distribution of Exports (¥1,000)

Year	China	Hongkong	Dutch Indies	Great Britain	U.S.A.	Siam	Kwantung
1923	.. 10,525	4,171	3,189	840	6,596	1,191	712
1924	.. 22,154	5,766	3,540	1,168	5,257	1,398	861
1925	.. 26,347	5,044	4,005	1,102	7,040	996	1,188
1926	.. 29,760	4,458	4,021	966	6,241	874	1,262

Distribution of Imports (¥1,000)

Year	China	British India	Dutch Indies	Great Britain	U.S.A.	Australia	Kwantung
1923	.. 17,498	1,495	4,023	1,958	6,370	621	3,708
1924	.. 26,327	2,705	3,033	2,885	3,505	1,175	1,063
1925	.. 30,572	3,853	3,448	5,372	2,218	506	2,105
1926	.. 27,217	10,573	4,110	2,705	2,102	805	2,033

PUBLIC WORKS

When China was in possession of the island, it seemed to be the policy of her Government to keep the natives quietly at their homes, as it did nothing to encourage road-making. Any roads that were found in the island were built by wealthy individuals.

In the first 17 years of Japanese occupation, 6,500 miles of roads were constructed, chiefly at local expenses. Since 1912, 240

miles of the most important ones have been reconstructed by the Government; and 1,800 miles more are being likewise improved.

The rivers of Taiwan are all torrential in their nature, bringing down an immense amount of detritus at every flood. The investigation for improvement was commenced in 1912; and the construction work has been going on since 1917. The money already spent for the work reaches a large sum.

The lack of good natural harbors in the island has made the construction of artificial ones a necessity. Keelung was the first one put in hand. The works there consisted of providing an anchorage with a depth of 30 ft. at low water, quay walls 6,000 ft. in length and breakwaters for sheltering the anchorage, the whole at a cost of ¥22,000,000. These works are now rapidly approaching completion. Takao, the nearest port to China, had its works commenced in 1908, consisting in the construction of breakwaters 3,040 ft. in length, and 4,386 ft. of quay walls; further dredging of 440 acres of mooring ground to a depth of 30 ft. at low water. These works which are to cost ¥25,240,000 are now nearly completed.

The tropical climate of the island making the supply of potable water a necessity, waterworks were started immediately after the occupation. Those for the cities of Taihoku, Keelung, Taichu, Kagi, Takao and 14 other smaller towns have already been completed at a total cost of ¥5,400,000, the greater part of which was borne by the Government.

The extensive cultivation of rice and sugar canes makes irrigation a work of utmost importance in Taiwan. The construction of main canals for the purpose undertaken by the Government was commenced in 1908, and is expected to be completed in 1932 at an estimated cost of ¥30,000,000. Other minor works of the kind are being carried out by individuals.

COMMUNICATION AND RAILWAYS

The complete system of post and telegraph service is in force, while two cables connect the island with Japan proper.

Railways.—The work of constructing the trunk line from Keelung to Takao (274 m.) by prolonging the ill-constructed Keelung-Shinchiku section (63 m.) laid by the Chinese Government, was begun in 1899, and completed in the spring of 1908. The construction of Tamsui (13.7 m.) and Hozan (20.4 m.) branch lines, hotels along the lines, etc. has also been completed. At the end of 1913 the Ako line (main 5.8 m., deflection 3.1 m.) was completed at the cost of ¥2,300,000, and the fertile plain of Ako was made easily accessible. The Taito railway, on the Pacific coast of the island, has been under construction at an estimate of ¥4,260,000. It runs from Kwarenko to Hinan, of which about 55 m. are now open to traffic. The total mileage open to traffic in Mar. 1927 was 610.9.

Besides the Government railways there are 1,349.6 miles of private railways laid by sugar companies, of which 884.7 m. are for the exclusive use of the respective sugar plantations.

CHAPTER XXXIX

KARAFUTO (SAGHALIEN)

INTRODUCTORY REMARKS

The southern half of Karafuto below 50° which Japan acquired by the Treaty of Portsmouth lies within 141° 51' and 144° 55' E. longitude and extends to 45° 54' N. lat. The whole district covers an area of about 13,245 sq. m. The eastern coast is washed by the Sea of Okhotsk while on the west the island faces Siberia across the narrow strait called Mamiya Strait or Gulf of Tartary. The southern extremity is forked into two arms which embrace the Bay of Aniwa, and is separated from the northern tip of Hokkaido by the Soya Strait only 23.7 miles across. The native inhabitants consist of various tribes, as Ainus (1,512), Gilyaks (56), Orotchones (268), and Tungues (115). These are gradually dwindling in number. The rest of the population consists of Japanese (215,443), Koreans (3,573), Chinese (83), and Russians (122). The chief towns are Toyohara (Capital, pop. 44,044), Otomari (56,029), Maoka (36,720), Honto (18,095), and Tomarii (31,679). The census taken at end of '27, puts the number of households in the territory at 44,323 and the population at 221,243, composed of 127,042 males and 94,201 females, the population recording an increase of 99,943 in each 5 years or 14.45 per 100 pop. The average annual temperature records about 38° F. at Maoka and 29° at Shikha. The minimum falls in January to 40° F. below freezing point while the maximum rises as high as 91° in August.

Finance

The revenue and expenditure of the Administration for the last two years are as follows (¥1,000):—

	1926-27 (Actual)	1927-28 (Estimate)
Revenue:		
Ordinary Revenue	14,648	13,942
Taxes	1,964	1,963
State undertakings and property.....	11,279	10,412
Revenue stamps and others.....	285	288
Receipts from Tobacco Monopoly.....	925	1,123
Miscellaneous	194	154
Extraordinary Revenue	7,673	6,212
Sale of State property.....	213	351
Forestry	3,475	1,829
Miscellaneous	2	2
Receipts from Public Loan.....	1,786	2,000
Grants from national treasury.....	1,577	2,029
Surplus from previous year.....	618	—
Borrowings for State undertakings...	—	—
Grand total	22,322	20,154

	1926-27 (Actual)	1927-28 (Estimate)
Expenditure:		
Ordinary Expenditure	8,937	10,162
Karafuto Shrine	13	13
Karafuto Office	1,385	1,540
Education	1,335	1,636
Police	517	540
Government undertakings	4,016	4,543
Other expenses	260	203
Transferred to sinking fund.....	1,408	1,504
Reserves	—	180
Extraordinary Expenditure	8,796	9,991
State undertakings	2,757	3,736
Engineering damage	924	429
Deforestation	1,253	2,306
Special undertakings	3,711	3,269
Others	150	250
Grand total	17,734	20,154

Japanese Immigrants

In April, 1919, it was gazetted that a small sum of money will be granted to those immigrants who settle down within 6 months of their coming over to the island. Land to be leased to the settlers covers 134,378 "cho."

The number of peasant settlers from Japan proper numbered 7,760 in 1925, 7,227 in 1926, and 4,751 in 1927. Immigrants from Hokkaido headed the list, amounting to 73,419 by the end of 1927.

Sanitation, Education, Religion

The government keeps under its direct management 3 medical offices with 17 physicians, and besides there are 135 public and 105 private practitioners.

At the end of March, 1928, primary schools numbered 178 besides 5 for native children, having altogether 33,230 attendants. There were also two middle school (with an attendance of 1,226), 4 girls' high schools (attendance aggregating 903) and 3 kindergartens (with 108 pupils).

Shinto shrines and Buddhist temples at the same date numbered 75 and 36 respectively, while Shinto, Buddhist and Christian missionaries were posted at 149 places. All these had 51,791 adherents, consisting of 22,379 Shintoists, 32,162 Buddhists and 250 Christians.

Fishery

Fishery is the oldest industry and by far the most important resources in Karafuto. The principal fish caught are herring, trout, salmon and cod. The right for fishing them is granted under three kinds of licence, the special, ordinary and drift-net fishing. The first is limited to bodies of fishermen on specific grounds, while the second is permitted only to those living in Karafuto. The last-named was formerly issued by public tender, but now it is restricted to certain persons.

Herring is chiefly exported as fertilizer, while the others are manufactured as food articles. Crabs are tinned and find market in England and America. Laminaria is also worth mentioning.

The value of marine products in the last few years is as follows (¥1,000):—

Year	Stationary fishing	Other modes of fishing	Total
1925	4,353	13,154	17,506
1926	4,827	15,203	20,030
1927	—	—	15,705

Farming and Stock-breeding

It has been ascertained that of the plains existing in the southern half more than 430,000 "cho" (1,053,500 acres) are available for tillage and pasturage. The settlers are cultivating the land deserted by the Russians, and are allowed about 5 acres per family. In 1927 these settlers numbered about 12,800 out of the total agricultural population of 42,683. The area under cultivation amounted to 14,122 "cho." Oats, rye, various kinds of tubers and vegetables, legumins, and also fibre plants such as flax and hemp are grown in the island, the total agricultural products amounting to ¥4,630,309 in 1927. Farmers are also engaged in stock breeding. A few years ago fox-farming was started.

Forests

Various kinds of pine-trees abound and form dense primeval forests at several places. They make splendid timber, though lack of convenient transportation is a serious obstacle. The trees have frequently been consumed by forest fires, that lasted even three consecutive years before they went out.

In 1927 there was 1,877,000 "cho" of forest land consisting of 199 000 "cho" of conifers with 20,000,000 "koku" of timber, 1,792 000 "cho" of broad-leaved species estimated to yield about 80,000,000 "koku." The conifers are "todomatsu" (*Abies sachalinensis*), "ezomatsu" (*Picea ajanensis*) and larch; white birch (willows and alders) predominate among the deciduous trees. For pulp and match-sticks the Karafuto forests are expected to acquire great importance. The authorities have an idea to start turpentine extraction.

In the year ended March 1925 the revenue from forests was: timber ¥3,803,180; firewood ¥71,055; other by-products ¥2,999.

Eight pulp mills exist in the island, these being conducted by Karafuto Kogyo, Oji Paper Mill, Fuji Paper Mill and others.

Minerals

The strata in the island are generally of Tertiary formations and hold rich veins of coal, the seams measuring as thick as 50 ft. at some places. The quality resembles Yubari coal of Hokkaido. The output for 1926 was 275,819 tons and for 1927 357,046 tons. Then alluvial gold and iron pyrite are also found.

In 1917 rich oilbeds were discovered on the western coast, and they are now being worked in paying quantities.

Japanese Concessions in Russian Saghalien.—For convenience of reference the Japanese concessions of coal and petroleum fields in Russian Saghalien may be described here. The Japanese have obtained license for five coal measures, all on western coast, with available resources of 907½ mil. tons. Only one is now worked extracting about 100,000 tons a year. Then license for 1,000 sq. versts of oil-bearing section has been secured. In one year ending Sept. 1927 one of the concessions yielded 70,000 ton crude oil, with prospect of supplying 150,000 tons in the next.

Railway

The light railway 26.2 m., that was laid between Odomari (Porokantomali) and Toyohara (Vladimirofka) on war account in 1906 has been transferred to the island authorities. The main line at present extends 58.5 m. from Odomari to Sakayehama, with a branch line from Konuma to the Kawakami Colliery, 13.4 m., while the western coast line from Honto to Noda measures 58.4 m. Of the line between Toyohara and Maoka the Toyohara-Suzuya section, 6.1 m. was completed in '25 and the Tel-Aisaka section, 19.2 m., in '26. The gauge is narrow.

In winter the trains make three or four hundred runnings a month, and in summer five hundred. The traffic results are shown below in 1,000:—

Year ended March	Train Mileage	Passengers carried	Goods hailed (ton)	Working revenue Yen	Working expenses Yen	Profit Yen
1924 ..	384	1,182	525	1,900	2,024	*536
1925 ..	452	1,293	509	1,751	2,726	*975
1926 ..	395	1,247	564	1,749	2,183	*435
1927 ..	405	1,335	646	1,916	2,170	*253

N.B.—* Loss.

Public Works

"Roads" connecting important points in the island, badly built as they were, were in existence at the time the island was ceded to Japan. It has been the work of the new occupant to improve these roads on the one hand and lay out new ones on the other. At the end of 1927 there were about 600 miles of roads averaging 15 ft. in width, and 38 miles of streets.

There are no large rivers in the island calling for extensive works for flood control. The primeval state of the forest has thus far conserved the natural regimen of the streams so well that the damages caused by inundations have been comparatively small.

Drainage of the low lands is found to be necessary for bringing them under cultivation. Up to the end of 1924 drains totalling 229 miles in length were laid out by the Government, and 233 miles of smaller ones by individuals with Government aids.

CHAPTER XL

SOUTH MANCHURIA & THE SOUTH SEA ISLANDS

SOUTH MANCHURIA

A. KWANTUNG GOVERNMENT-GENERAL

The lease of South Manchuria lapsed to Japan by the Portsmouth Treaty concluded in 1905. The original term was to expire in 1923 but was extended till 1997 by the Sino-Japanese Treaty on May 25th, 1915.

Kwantung Province forms the southern part of Liaotung Peninsula, extending between $121^{\circ} 4'$ and $122^{\circ} 34'$ E. longitude and $38^{\circ} 43'$ and $39^{\circ} 33'$ N. latitude. The area covers, including the 40 islands adjacent to the peninsula, 1,336,861 square miles.

By the Imperial Ordinance issued on April 12, '19, a wholesale change was effected in the organization of the Kwantung Government-General (Totoku-fu), which has become a civil government and is called the Kwantung Office (Kwanto-cho). A civilian governor has superseded the Governor-General who was a General. The Governor-Gen. has under his jurisdiction, the Province as well as the South Manchuria Railway. He may issue punitive ordinances inflicting penalties of not more than one year imprisonment and fine of not more than ¥200. The Government Office consists of the Governor's Secretariat, Civil Administration and Foreign Affairs Departments. The chief military officer is the Commander of the Kwantung garrison.

Dairen, a Free Port

As notified on Aug. 22, 1906, by the Government to the Foreign Diplomatic Representatives in Tokyo, the port of Dairen (or Dalny) was opened as a free port on Sept. 1, 1906. Foreign merchantmen are therefore free to engage in navigation and trade between Dairen and Japanese open ports, and they may also proceed direct from any foreign port to Dairen. The city is built wholly in Western style in accordance with the plan first laid by Russia. The houses are of brick and stone, and no frame building is permitted within the city limit. The systems of water-supply and sewerage are complete and not equalled by any in the Orient.

Population

The population of Kwantung Province is, exclusive of Japanese garrisons stationed in the peninsula, as follows:—

		Male	Female	Total
1926	{ Japanese	118,251	109,050	227,301
	{ Chinese	538,914	327,592	866,506
	{ Foreigners	1,190	906	2,096
	{ Total	658,355	437,548	1,095,903

SOUTH MANCHURIA & THE SOUTH SEA ISLANDS 699

Besides, the inhabitants in the railway zone made the following record at the end of Aug. 1927:—

Japanese	98,860
Chinese	196,762
Foreigners	1,736
Total	297,358

Principal Cities at the end of August, 1927

	Japanese	Chinese	Foreigners	Total
Port Arthur	10,718	109,279	47	120,043
Dairen	55,123	112,125	441	167,689
Kinchou	1,361	102,358	2	103,721
Shahoku	—	—	2	—

Finance

Revenue and Expenditure for 1926-27 and 1927-28

(In ¥1,000)

	1926-27 (Actual)	1927-28 (Estimate)
Ordinary Revenue:		
Taxes	3,689	3,389
Public undertakings and State property..	6,878	7,150
Revenue stamps	670	444
Other receipts	279	322
Total	11,516	11,305
Extraordinary:		
Sale of State property.....	594	402
Surplus of previous year transferred....	3,911	1,206
National Treasury grant.....	3,000	4,000
Proceeds from Public loans.....	—	—
Total incl. others.....	7,505	6,609
Grand total	19,022	17,915
Ordinary Expenditure:		
Gov.-General's Office	1,434	1,510
Law-courts and Prisons.....	484	482
Police	3,739	3,595
Education	1,955	2,191
Communication expenses	4,137	4,396
Harbor office	147	1,153
Hospital	96	112
Total incl. others.....	12,410	13,485
Extraordinary:		
Undertaking expenses	1,977	3,194
Land Adjustment	7	7
Total incl. others.....	2,170	4,429
Grand total	14,580	17,915

Foreign Trade

Volume as Classified by Countries

(In 1,000 Taels)

		1927		1926	
		Export to	Import from	Export to	Import from
Japan {	Chosen	2,002	1,012	1,378	524
	Proper	86,821	65,582	82,900	48,903
China		53,341	28,281	57,555	38,567
Hongkong, India & South Seas		9,547	7,957	7,346	5,111
Others		37,826	30,301	22,081	21,934
Total		189,539	133,134	171,259	115,040

Education

The Administration Office maintains Primary schools and some higher organs of education, i.e. Technical College, Normal School, Middle Schools and Girls' High Schools in Port Arthur, Dairen, etc. The South Manchuria Railway also keeps a number of Primary and Higher Schools in the Railway zone, including the South Manchuria Medical College and the S. M. Technical School at Mukden. Dairen and Port Arthur are each provided with a Middle and a Girls' High School. Besides, there are a good many private schools of elementary grade, technical schools and girls' schools, and supplementary schools run by both Japanese and Chinese.

The principal institutions make the following record for 1926:—

	No.	Teachers	Pupils
Kindergartens	38	93	2,645
Primary schools	52	703	23,121
Primary schools for Chinese.....	120	457	18,268
Middle schools	8	171	3,228
Girls' High schools	7	151	3,109
Commercial and Technical schools.....	7	134	2,100
Normal school	1	40	200
South Manchuria Med. College.....	1	57	370
South Manchurian Technical School.....	1	39	217
Port Arthur Technical College.....	1	71	276

Garrison and the Railway Guards

One Division is stationed as garrison at Liaoyang. The garrison service will be taken up in turn by the Divisions at home, the term being two years. The Division to which the duty of garrison is assigned is to proceed to the seat of garrison in October of the year and the Division which has served the term is to return home in November.

In conformity with the provisions of the Portsmouth Treaty of Peace, Japan has stationed 16 independent battalions of guards along the line, each composed of 21 officers and 617 rank and file. The battalions were organized with time-expired non-commissioned officers and men up to 1916 when they were displaced by those in active service. The distribution of garrisons is as follows:

Liaoyang, Div. and Brigade headquarters, one Reg. and one battalion; one Reg. at Tieling; Brigade headquarters and one Reg. at Lutszon; one Reg. at Port Arthur; one Reg. of cavalry at Haicheng. Heavy artillery at Port Arthur is drawn from the 4th and 11th Divisions at home. The Commander of the Garrison, full or Lieut.-Gen., is under direct control of the Emperor, while as regards military administration and personnel he is subordinate to the Minister of War and others.

B. THE SOUTH MANCHURIA RAILWAY COMPANY

The railway was ceded by Russia to Japan on Sept. 5th, 1905, and was renamed the South Manchuria Railway by the Japanese Government which issued regulations for converting it into a semi-private concern. The general meeting for organization was held on Sept. 10th-14th, 1906 and the draft of the company contract was passed. On April 1, 1907 the Field Railway Office formally transferred the railways and all belongings to the company.

The Company Contract and Exploitation

The original capital of ¥200 millions were divided into two million name shares of ¥100 each, one half of the capital being represented by the Manchuria Railway and accessories and the coal mines at Fushun and Yentai belonging to the Japanese Government, which therefore owned 1,000,000 shares. The remaining shares were offered to Japanese and Chinese subjects, and the entire sum has been called in. The Government guaranteed profit of 6 per cent. on the paid up capital for 15 years, and refrained from claiming dividend on its shares when it did not come up to 6%. In 1913 the Co. obtained approval of the Government to distribute a dividend of 7%, and in following years one of not more than 10%. In the latter half of 1920 the capital was increased to ¥440 millions (355 mil. p.u.) of which the home government took up ¥120 millions by accepting the liability of the Co.'s debentures issued to that amount in England. The Co. is now paying a dividend of 4.3% on the Government shares for ¥220,000,000.

Railway.—The railway system is made up as follows:—The main line from Dairen to Changchun (438.5 m.), Port Arthur branch line (31.6), Yinkow branch (13.9), Fushun branch (32.9), Yentai branch (9.7), Mukden-Antung line (161.7), 698 m. in all. They are all of standard gauge. The main and Mukden-Antung lines form part of the international through traffic service.

Harbor.—At Dairen the harbor works partly started by the Russians have been carried out on a most extensive scale. Break-waters totalling 13,121 ft. in length, warehouses and covered sheds covering about 100,000 tsubo an area of 900 quay walls more than 16,137 ft. in length, have been constructed, and with loading and unloading appliances complete Dairen may well claim the honor of being the most important outlet in Manchuria.

Coal Mines.—The colliery work of Fushun and Yentai forms one of the most important undertakings. The output at these two reached 6,624,260 tons for the year ended Mar., 1926.

The Fushun Colliery, situated about 22 miles east of Mukden, as the crow flies, runs for about 12 miles parallel to the river Hun, and contains deposit of 80 to 420 ft. in thickness, an average of about 130 ft., with the total deposit of about 1,000 million tons. 7 pits and 2 open air strata are now worked with the total output of 20,000 tons a day. The quality too is excellent, being of strong calorific power and containing very little sulphur.

The Yental Coal Fields exist north-east of Liaoyang and can be reached in an hour by rail from the Yental station. The seams number 16, of which 4 are workable, i.e. first seam of five ft. second of 4 to 6 ft., third of 3 to 8 ft. and fourth of 5 ft. The coal is soft and pulverizable, emitting but little smoke. The deposit is estimated at 20 million tons and the daily output, according to the latest report, reaches about 400 tons.

Other Concessions.—The other concessions are Shipelling and Taohiatun near Changchun transferred to the South Manchuria Rly. at the time of the junction negotiation. The two are left in trust of a special co. This is also the case with Tseotzeyang which was handed over to the Co. at the first with Fushun and Yental. The Co. acquired in 1927 an extensive lease rich in timbers, farms and mines from a certain magnate in Kirin.

The production for last few years and equipments are as follows:—

Year ended March	Output (tons)		Equipment	(March 31, 1927)	
	Fushun	Yental		Fu lun	Yental
1924	4,929,585	99,976	Engines	120	5
1925	5,538,614	103,850	Winches	153	6
1926	6,414,060	210,200	Pumps	136	18

Oil Shale Deposit.—The Company owns a large oil shale deposit situated about 25 miles from Mukden and covering an area of 24 square miles. There the coal seam is 130 ft. thick and is covered by a layer of oil shale 400 ft. thick. The coal is low grade but is expected to yield about 15 gallons of oil to the ton. The Company has on foot a program of developing the shale and coal bonanza at the estimated cost of ¥20 millions extending over a period of 5 years. This program is believed to supply half a million tons of oil yearly which is enough to meet the annual consumption of the Japanese Navy.

The Railway Zone and Management.—The total area of land belonging to the Company amounts to 68,443,246 "tsubo." Excepting the area used by the Company and the Kwantung Government, the whole is open for rent at the rate of $\frac{1}{4}$ to ten "sen" per "tsubo" per month for building lots, and 1 to 3 "sen" for farming land. By May 1919 over 16,853,000 were under lease contract. In the railway zone the Company maintains 14 hospitals, 26 primary schools, 11 Chinese (common) schools, 23 continuation business schools, 10 girls' practical schools, one medical college at Mukden, and a technical school and a teacher's training institute at Dairen, etc. Besides these, the Company keeps a polytechnic laboratory, 2 agricultural experiment stations and 13 farms with the object of encouraging industry. It undertakes 17 water-supply works.

Overhauling of the Co's Undertakings.—In 1927 the Company effected complete overhauling of its organization. In the first place it cut down the book value of its property by ¥145 millions

in railway, mining, etc. and at the same time the value of the land was raised by so much. Over two thousand officials or upwards of 20% of the whole staff were cashiered. The businesses set apart either on that occasion or before as independent concerns are Electricity, Gas and Hotels. On the other hand several new enterprises have been started or about to be so. These are as follows:—

1. Trust Co. cap. ¥100 mil., paid up ¥50 mil. to deal with the vested interest and loans of the Co. and trust business of Chinese capitalists.

2. Sulphate ammonia plant, cap. ¥16,000,000 to establish a plant at Anshan for producing 70,000 tons of the chemical per annum.

3. Soda ash plant, cap. ¥5,500,000 near Dairen to turn out 50,000 tons.

4. Life insurance business with the capital of ¥3,000,000.

5. Oil shale business at Fushun with the capital of ¥8,000,000 to produce 30,000 tons of heavy oil and, as by-products, 18,000 tons of sulphate of ammonia, raw paraffin 9,500 tons and cokes 5,000 tons.

6. Adjustment of the Toa Kangyo shares by taking over one half of the total shares from the Oriental Development Co. and cutting down the capital ¥20,000,000 to one half, the investment in land and other businesses undertaken by the Toa to be restarted on new footing.

7. Tug-boat business between Yingkow and Tientsin by constructing 250 ton steel tugs for transporting passengers and cargo.

8. Beef on hoofs from Manchuria and Mongolia of about 20,000 head a season, and to ship Japanese cows to the region to improve the quality of the flesh.

The Administrative System.—The Government reserves the right of appointing members of the administrative body. The term of the President and the Vice-President is 5 years, that of Directors is four years (selected by the Government from among shareholders holding at least 500 shares). Auditors are elected for three years at the general meeting of shareholders.

Board of Directors.—President, J. Yamamoto, Vice-Pres., Y. Matsuoka; Dirs., T. Oka; H. Fujine; T. Komuchi; R. Saito; T. Tanabe; N. Kohiyama.

Business Report for 1927-28 year ¥(1,000)

Receipts		Expenses		Receipts		Expenses	
Rly Service	113,244	45,236		Miscellaneous	2,483	—	
Harbor and Wharf	10,276	9,306		Interest	5,446	3,936	
Mining	82,787	73,039		Debt charge	—	16,632	
Iron Works	9,223	9,391		Total incl others	230,559	194,284	
Hotels	1,001	1,245		Profit	36,274	—	
Local undertakings	6,098	19,104					

Principal Assets and Liabilities (¥1,000)

(March 31st, 1928)

Assets			
Unpaid capital	84,844	Deposits in banks.....	40,490
Rly lines	239,518	Loans	59,453
Rly shops	8,760	Securities	55,287
Ships	4,045	Total Incl. others....	994,948
Harbor and wharf.....	59,789	Liabilities	
Mines	102,731	Cap. p.u.	355,156
Iron works	20,748	Reserves	17,464
Local equipments	164,679	Special reserves	127,400
Miscellaneous buildings.	44,574	Debentures	278,152
Products	4,787	Sinking fund	23,372
Materials in stock.....	7,451	Profit for the year.....	36,274
		Total Incl. others....	994,948

KIRIN-CHANGCHUN RAILWAY

From Changchun, the northern limit of the South Manchuria Railway, to Kirin, distance 79 m., a railway was completed on Oct. 16th, 1921, in accordance with the treaty between Japan and China concluded in April 1907. The line was laid at a cost of ¥4,500,000 borne in equal shares by the two countries and under the superintendence of Japanese engineers. The Japanese share of ¥2,250,000 was met by the South Manchuria Railway and is repayable by China within 25 years from the date of opening. Twelve stations exist along the line, the journey taking 6 hrs.

AGRICULTURE AND INDUSTRY

The farming products in the Leased Territory are not worth mentioning. Along the railway zone, the districts north of the Antung Line are more fertile than the rest of the provinces.

Principal Crops

Year	Maize	Kaoliang	Soya bean	Millet	Wheat	Ground nut
1924	566,897	200,941	61,947	131,103	8,534	508,770
1925	592,840	206,221	108,274	120,362	6,897	630,742
1926	534,576	177,772	103,162	115,319	7,151	731,772

Soya Beans.—The fame of Soya beans has spread over the world since 1906 when the Mitsui Bussan first shipped a trial consignment to England. The yield of beans in Manchuria amounts to about 28,000,000 "koku" (4,000,000 tons) including all species and the output of bean-cakes about 60,000,000 pieces valued at ¥110,000,000. In the Leased Territory and the railway zone alone bean cakes and oil were produced to the amount of 38,289,174 pieces and 177,127,093 "kin" respectively valued at ¥70,884,888 and 32,989,610 in 1924, the bulk going to Europe, Japan and China through Dairen and Newchuang (Yinkow).

Favored by rich natural resources and abundant fuel and cheap labor, the industry in the Leased Territory and the rail-

way zone has made a rapid expansion. Bean oil making and flour milling are principal industries, followed by iron foundry, paper, soap, glass and bricks. Recent statistics regarding workshops and their production are given below:—

Workshops

1926	No. of workshops	Employees	Capital Yen 1,000
Leased Territory	382	5,301	122,128
Railway zone	273	6,027	172,609
Total incl. others.....	685	13,000	301,679
Total for 1925.....	673	10,805	283,546
Total for 1924.....	658	10,155	192,936

Principal Manufactures (in 1,000)*

Year	Flour		Iron		Bricks		Cement	
	Bags	Yen	Tons	Yen	Pieces	Yen	Barrels	Yen
1924	1,959	8,133	81	4,323	102,335	1,599	650	3,806
1925	—	7,262	—	5,856	—	1,033	—	3,434
1926	—	8,122	—	5,853	—	1,590	—	6,154

* For bean oil and cakes see above.

THE SOUTH SEA ISLANDS

Japan acquired through the Treaty of Peace the mandatory right over the former German South Sea Islands north of the Equator. The archipelago had been occupied by a Japanese squadron in the beginning of the World War. It consists of three groups of Mariana, Marshall, and Caroline, covering altogether an area of 960 square miles with about 50,000 natives. Of about 1,458 islets forming the groups those that are comparatively larger make the following record:—

Mariana	Area (k.m)	Popul.	Long. E.	Lat. N.
Salpan	185	8,329	145°40'	15°5'
Tinian	130	368	"	"
Rota	114	525	145°13'	14°
Pagan	32	86	"	"
Caroline				
Ponape	347	5,506	158°10'	6°45'
Yap	207	4,684	137°58'	9°25'
Trak	132	8,564	151°22'	6°57'
Kusaie	110	955	162°58'	5°15'
Parao	450	3,202	143°10'	6°50'
Marshall				
Yaluit	90	2,131	169°42'	5°48'

Climate, Natives, Religion, etc.

The climate is comparatively mild for the latitude owing to the monsoon and showers. Both in Mariana and Caroline groups the temperature stands throughout the year between 26° and 27°C. In Yaluit, the largest in the Marshall group, the average annual temperature is 27°19'C. the minimum and maximum being 21° and 36°9' respectively. The natives are mostly Micronesians mixed with other Polynesian races in various degrees. They are indolent and easy-going, and subsist on natural production. They have no religion of native origin. Christianity entered the field far back in the Spanish days. During the German rule Protestant (American) and Catholic missions were at work but so far their influence seems to have been superficial.

Japanese Administration

The Military Government was established in 1914 and Civil Administration in June 1918, the latter superseding the other in 1922. For the benefit of native children common schools have been opened at Saipan, Kusale, Ponape, Yap, Trak, Parao and others. Since 1915 a number of chiefs and other important personages in the groups have been brought over to Japan for sight-seeing. The seat of the Government was removed from Trak to Parao in 1921.

Japanese Industry, Trade, etc.

At present about 5,550 Japanese are at work exploiting the native resources. Principal items are phosphorus ores (chiefly in Carolines) worth ¥1½ millions and coconuts (chiefly in the Marshall) ¥1 million. Besides, copra yields about 8,000 tons valued at over ¥1 million. Flour, rice, meat, piece goods, building materials, machines, etc., are the chief imports, totalling in 1924 about ¥2,513,384 against ¥3,535,459 of exports. Fishery is primitive, but according to the opinion of the experts the prospect of the marine industry is said to be bright. The Mariana group produces sugar canes amounting to 58 mil. "kin" and sugar to 2 millions.

CHAPTER XLI

THE PROGRESS OF RECONSTRUCTION

GENERAL REMARKS

With heroic courage and grim determination the central and local authorities concerned have at last succeeded in breaking the neck of the stupendous work of reconstructing the devastated area of Tokyo and Yokohama and have pushed to the verge of completion the task which in scope and magnitude has no parallel in the history of the world. The whole program of Reconstruction will be practically completed, in form at least, by the end of the fiscal year 1929-30, a year later than was originally designed. Considering that the devastated area requiring reconstruction covers no less than 11,000,000 tsubo (8783.33 acres) and that the fund estimated for the work amounted to about ¥700 millions, the Reconstruction authorities may well feel relieved at the progress they have achieved.

The Reconstruction budget revised in 1927 stands as follows:—

Expenses borne by State.....	¥596,483,000
State subsidy for fire zone buildings.....	20,000,000
Expenses borne by local governments.....	¥70,683,379

Of the last mentioned figure, ¥128,080,000 is to be met with State subsidy and the remainder to be defrayed by the local governments.

For the clearer understanding of the complicated problem of Reconstruction the broader aspects of city planning, such as street adjustment, bridges, etc. will be treated first, to be followed by detail description concerning the readjustment of building lots. This subject was briefly described in our 1924-25 (Earthquake) edition, but it may be reviewed here once more, especially in view of the progress subsequently effected and also of some modification in the original plan.

Street Adjustment

The main idea underlining this primary work of city planning in Tokyo is to increase the percentage of roads to the total area of the urban districts from only 12% before the disaster to 25%, nearly equal to the figure in Paris and Berlin. To enter into some details of the plan it may be noted that two cross lines of principal main thoroughfares will traverse the city, one running south to north with the breadth of 32.76 to 45.76 metres and the other east to west with the breadth of 27.30 to 36.40 metres. On the spaces embraced by these two principal thoroughfares of the city will be laid down 52 lines of secondary main thoroughfares, each with the breadth of over 21.84 metres, and with a

combined length of about 73.20 miles, and over 120 auxiliary streets, each with the breadth of 10.92 to 21.84 metres and with a combined length of about 85.40 miles. The spaces thus divided are again divided by a number of smaller streets each with the breadth of 10.92 metres or less, their combined length extending for over 292.80 miles. All these streets, primary or secondary, will present somewhat irregular chessboard pattern, as the condition of existing roads are to be taken into consideration. In the up-town sections outside the burnt area and the suburban districts, the cob-web pattern consisting of mixed radiating and circular lines has been adopted for re-modelling the street lines according to the main road net plan mapped out in the summer of 1927. By the end of May '28 the work of street readjustment in Tokyo had been completed to the extent of about 60 per cent.

Reconstruction of Bridges

The number of bridges under municipal control in Tokyo before the 1923 disaster was about 600, mostly wooden structures, and even a few iron structures that existed were far from being fire-proof as the terrible catastrophe proved. Of the total number as many as 366 bridges were either destroyed by the shocks or consumed in the quake-fire or badly damaged by both. Taught by this sad experience it has been decided to make all bridges in important places as quake-proof and fire-proof structures.

The bridging work included in the Metropolitan Reconstruction program covers the construction, reconstruction or repairs of 465 bridges at the estimate cost of ¥24,355,000, the work spreading over 6 years (1924-29). The figure comprises ¥13,760,000 for construction of 134 bridges newly erected along the auxiliary streets, ¥1,836,000 for construction of 53 new bridges in connection with the lot readjustment work, ¥947,000 for repair of 194 bridges and ¥7,812,000 for reconstruction of 84 bridges, all in the devastated zone. Up to the end of December 1927 the construction or reconstruction or repairs of 43 bridges had been completed while 23 bridges were in course of construction or reconstruction at the end of Mar. '28 and lastly work for other 34 bridges was started in Apr. the same year.

Six bridges on the Sumida river, Tokyo, including four new bridges (Kototol, Komakata, Kuramaye and Kiyosu), were completed by February 1928, the total cost for the six structures amounting to ¥12,200,000. With the three old bridges which escaped devastation in the 1923 disaster there are now ten bridges spanning the river in place of four before the disaster.

Parks

In the pre-disaster days the per capita area of parks in Tokyo was only 37/100 tsubo as against 2¼ tsubo in London, 2 tsubo in Paris, 16 tsubo in Washington and 3½ tsubo on the average in 22 large cities in Europe and America. The ratio will be increased to about 54/100 tsubo. The Reconstruction program provides the establishment of a river-side park (Sumida Park) with an area of about 40,000 tsubo (32 acres) on the banks of the Sumida river, a park with an area of 11,000 tsubo (8.99





acres) in Nihombashi (Hamacho Park), and another with an area of 17,000 tsubo (13.89 acres) in Honjo (Kinshi Park), these as State undertaking. In addition to them, 51 smaller parks or squares each with an area of about 900 tsubo (3,557 sq. yards) are to be laid out in various wards of the city as municipal undertakings. These smaller parks and squares are all located in close vicinity to primary school grounds.

Adjustment of Building Lots

What complicates the work of Reconstruction is that a new comprehensive city planning according to the approved principle of modern time is to be carried out without affecting the private interest of the citizens concerned. The long established system of purchasing or expropriating land necessary for the improvement of roads or canals or the erection of public schools, parks, etc. does not answer the purpose for the present reconstruction work which requires a vast area of land, approximately 700,000 tsubo (571.82 acres) being required for effecting the projected city planning. If steps were taken to purchase or expropriate such extensive area of lots and drive out the dwellers from the land thus purchased or expropriated some 200,000 citizens would be rendered homeless. The method adopted for carrying out the dual work was in this wise:

The burnt area has been cut up into 65 replotting divisions, and in each a re-plotting committee of 16 to 25 members has been elected by the land-owners and tenants of the division with full authority to decide upon all matters regarding the auxiliary streets, the cutting up of blocks within its division into lots and distributing the new lots among the old owners. All the land taken for streets, parks and other public purposes in excess of 10 percent is to be paid for by the city or by the State, according to the location and uses of the land condemned.

As witnessed at those quarters where the re-plotting process has been completed, i.e. at Surugadai, Hibiya, Hamacho, Minowa, Mikawashima, etc., the advantages of town planning by means of re-plotting are obvious. The work, besides highly improving the traffic facilities and beautifying the aspects of the streets, has also increased the value of dwelling land. However, it taxed the ingenuity of the Committees and others concerned to determine the compensation for the excess of 10 percent of the expropriated area, and the knotty problem was at last solved by adopting a peculiar method modelled after the valuation system followed by the Municipality of Cleveland (U.S.A.).

Needless to say an absolutely fair re-distribution of lots was out of question, so that special devices had to be adopted for adjusting the differences between those who receive less and those who get more than they had before the disaster. Small lot owners whose plots are absorbed in the new plan are compensated for their losses. Lot holders who suffer material damage from the process and tenants and lease-holders possessing various rights attached to the land are also similarly treated.

Of the 65 re-plotting divisions or sections into which the burnt area has been divided, the work in 15 divisions is State

undertaking and that in the remaining 50 divisions municipal undertaking. The re-plotting in 14 divisions was completed by the end of May '28, the rest to be finished in the course of 1929. The number of buildings to be removed in the re-plotting zone totals about 202,000, and removal orders for the entire number of buildings had been issued by the end of May '28. By the same date about 128,000 buildings had finished removal, the figure corresponding to 63.5 per cent. of the total number, this showing a marked progress made during the past one year as compared with the figures at the same date of the previous year, about 40,000 or 27 per cent. The removal of the remaining number of buildings will be finished within the current fiscal year.

The marked progress of the re-plotting work since last year has accelerated a similar progress of various works incidental to reconstruction, namely the construction and improvement of streets, bridges, rivers and canals, all of which is expected to be completed within next fiscal year (1929-30). The land expropriation and construction of three large new parks, namely, Hamacho, Sumida and Kinshi Parks, as State undertaking are also making steady progress and will be finished by March 1930. Again, the expropriation of land for the construction of 51 small parks in the city limits which is conducted as municipal undertaking has been completed early this year while six such parks have been already finished.

Removal Allowance.—The allowance incidental to compulsory removal required by the readjustment of lots has produced a big deficit in the Reconstruction Budget. At first the allowance was estimated at ¥27.50 per tsubo of houses removed, but in practice this had to be raised to over ¥40 on the average, the total deficit occasioned thereby amounting to the neighborhood of ¥100 millions. It was decided in 1927 by the Home Office and Tokyo City that about one half of the amount be met by curtailing the prescribed scope of the Reconstruction program, and the remaining half to be raised with an additional subsidy from the Treasury and with a Municipal loan. The whole question requires approval of the Diet, and is therefore left in suspense for the time being.

The Fire Zones

The zones specified in 1922 for the two cities of Tokyo and Yokohama had to undergo more or less modification in consequence of the disaster that befell them in the following year. One of the most important legislations newly adopted since then as regards the fire zones was the enactment in 1924 of the Building Aid Regulation. The Treasury set apart in the Reconstruction Budget ¥20,000,000 with the object of allowing aid at the rate of ¥20-50 per tsubo to those who construct approved permanent buildings in the fire zones, this aid spread over five years ending 1928-29. The fund has so far been left practically untouched, only about 10% being disbursed. The explanation is that the period of overhauling the temporary buildings in the fire zones has been prolonged till 1938 and also chiefly because, as is generally thought, the calamity has too seriously crippled the citizens financially to enable them start the construction of costly fire-proof houses. It should be remembered that the building

area in the fire zone of Tokyo as converted to one-story level area totals 1,151,000 tsubo (939.98 acres), and that in Yokohama 201,000 tsubo (164.15 acres), but the permanent buildings sanctioned covered only 86,464 tsubo in Tokyo by April 1927, while in Yokohama the corresponding figure was 4,415 tsubo by June the same year. In other words, the permanent construction sanctioned did not exceed 7.6% of the total building area in the fire zone of Tokyo and less than 2% in the other city.

PROGRESS OF LAND READJUSTMENT (May 31st, 1928)

1. Area of Exchange Lots

Tokyo	Sections where exchange lots have been arranged	Total area before replotting	Area of exchange lots decided	Total area after replotting	Rate of progress
Undertaken by State & City	65	7,106,822	5,990,889	5,990,889	84.3%
Yokohama					
State & City	13	410,317	674,055	674,055	100.0%

2. Removal of Buildings

Tokyo	Sections where orders were all issued	No. of bldgs. to be removed	No. of bldgs. ordered removal	No. of bldgs. with removal recompensation decided on	No. of bldgs. removed by May 31, '28
Undertaken by State & City..	65	203,995	197,488	176,163	128,730
Yokohama					
State & City..	13	19,042	19,042	18,965	18,938
Total	78	223,037	216,530	195,128	147,668

ROADS

1. Main Thoroughfares (as State undertaking)

(May 31st, 1928)

	No. of roads	Total length (metres)	Percent surveyed	Percent planned	Percent taken up	Percent completed
Tokyo	52	117,065	100	35	75	50%
Yokohama	13	30,373	100	45	90	74%

2. Auxiliary Roads (as Municipal undertaking)

(May 31st, 1928)

	No. of roads	Total length (metres)	Completed (metres)	Under work (metres)	Work being prepared (metres)	Rate of progress
Tokyo	122	139,831	56,875	6,340	—	55%
Yokohama	10	12,295	11,774	521	—	95%

3. Side Roads (as Municipal undertaking)

(May 31st, 1928)

	No. of roads	Total length (metres)	Completed (metres)	Under work (metres)	Work being prepared (metres)	Being planned (metres)
Tokyo	—	379,090	152,705	173,878	52,510	42,567
Yokohama.	2	10,324	6,666	2,622	1,036	—

BRIDGES

Undertaken by the State (May 31st, 1928)

	Total number	Completed	Under work or being prepared	Rate of progress
Tokyo	112	53	59	80%
Yokohama	34	25	9	84%

Undertaken by the Cities (May 31st, 1928)

	Total number	Rate of progress
Tokyo	134	80%
Yokohama	64	78%

CANALS (May 31st, 1928)

Tokyo	Number	Total length (metres)	Percent planned	Percent progress	Percent completed	Rate of progress
Improved or excavated .	12	15,425	62	55	46	66%
Reclaimed ...	1	374	100	100	100	90%

PARKS (May 31st, 1928)

Tokyo	Total area (tsubo)	Area expropriated (percent)	Percent of work progressed
Hamacho Park.....	11,000	100	45
Kinshi „	17,000	100	98
Sumida „	39,000	95	35
Total	67,000	98	56
Yokohama			
Nogeyama Park.....	25,000	100	45
Yamashita „	22,000	100	45
Kanagawa „	4,000	100	65
Total	51,000	100	40
Grand total	118,000	99	50

The progress of land adjustment work and various incidental arrangements in Tokyo and Yokohama for the past four years ending 1927 is shown below (the figures representing the condition at the end of each year):—

Arrangement of Exchange Lots

	Exchange lots arranged		Area of Exchange lots		Exchange lots completed	
	Finished area (tsubo)	Rate of progress (%)	Finished area (tsubo)	Rate of progress (%)	Area (tsubo)	Percent to total
Tokyo:						
1924	409,441	0.068	67,711	0.011	—	—
1925	2,259,000	0.377	451,000	0.075	—	—
1926	5,359,011	0.885	4,867,109	0.804	67,711	0.011
1927	5,991,222	1.000	5,991,222	1.000	331,516	0.055
1928* ...	5,990,889	—	5,990,889	—	—	—
Yokohama:						
1924	—	—	—	—	—	—
1925	2,259,000	0.377	451,000	0.075	—	—
1926	673,523	1.000	603,917	0.897	—	—
1927	672,588	1.000	672,588	1.000	260,918	0.387
1928* ...	674,055	—	674,055	—	—	—

	No. of buildings ordered removal		Compensation for removal granted		Removal finished by Dec. 31st	
	Orders issued	Rate of progress %	Finished cases	Percent to total	No.	Percent.
Tokyo:						
1924	346	0.002	—	—	—	—
1925	12,517	0.062	7,939	0.039	2,913	0.014
1926	68,403	0.337	42,299	0.208	27,241	0.134
1927	201,212	0.991	133,253	0.657	88,506	0.436
1928* ...	22,652	—	176,163	—	—	—
Yokohama:						
1924	—	—	—	—	—	—
1925	943	0.049	385	0.020	20	0.001
1926	10,807	0.607	6,165	0.324	3,672	0.206
1927	19,051	1.000	19,051	1.000	16,232	0.852
1928* ...	18,965	—	18,938	—	—	—

*By end of May.

Undertaking by State

	Main thorough- fares		Bridges		Parks			Canals	
	No.	Percent completed	No.	Percent completed	No.	Land	Work	No.	Percent completed
Tokyo:									
1924 ...	53	0.02	155	0.07	3	0.50	—	14	0.04
1925 ...	53	0.18	111	0.24	3	0.76	—	14	0.17
1926 ...	52	0.28	111	0.53	3	0.87	0.15	14	0.39
1927 ...	52	0.37	112	0.75	3	0.97	0.44	14	0.60
Yokohama:									
1924 ...	12	0.02	37	0.03	3	—	—	2	—
1925 ...	13	0.01	40	0.21	3	0.27	0.07	2	0.36
1926 ...	13	0.14	35	0.43	3	0.63	0.28	2	0.52
1927 ...	13	0.65	35	0.75	3	0.95	0.45	2	0.78

Undertaking by Municipality

	Auxiliary roads				Bridges			
	Total length (metres)	Completed (metres)	Under work (metres)	Other (metres)	No.	Com- pleted	Under work	Other
Tokyo:								
1924	131,511	—	5,727	397,330	143	—	—	14
1925	132,152	8,404	8,922	17,227	143	1	8	22
1926	138,765	18,984	14,154	16,042	143	10	18	24
1927	138,765	36,718	36,046	16,574	143	30	13	44
Yokohama:								
1927	22,555	10,200	10,256	1,496	83	34	37	12
	Parks				Primary schools			
	No.	Completed	Under work	Other	No.	Completed	Under work	Other
Tokyo:								
1924 ..	52	—	—	6	117	3	2	8
1925 ..	52	—	2	8	117	5	11	43
1926 ..	52	3	3	7	117	12	29	56
1927 ..	52	6	—	11	117	40	32	41
Yokohama:								
1927 ..	4	1	1	2	—	—	—	—

RECONSTRUCTION EXPENDITURE BY STATE (in ¥1,000)

	Total estimate	1923		1924	
		Estimate	Actual disbursement	Estimate	Actual disbursement
Reconstruction					
Expenditure	<u>342,193</u>	<u>6,292</u>	<u>3,431</u>	<u>87,607</u>	<u>5,465</u>
Reconstruction					
of Tokyo	<u>306,678</u>	<u>5,706</u>	<u>3,380</u>	<u>77,955</u>	<u>44,470</u>
Roads & streets..	<u>257,458</u>	<u>4,447</u>	<u>3,148</u>	<u>63,790</u>	<u>38,122</u>
Canals	<u>28,500</u>	<u>370</u>	—	<u>6,040</u>	<u>1,523</u>
Parks	<u>11,900</u>	<u>282</u>	—	<u>3,853</u>	<u>4,122</u>
Land adjustment.	<u>9,750</u>	<u>600</u>	<u>232</u>	<u>4,272</u>	<u>706</u>
Reconstruction					
of Yokohama ...	<u>35,514</u>	<u>586</u>	<u>51</u>	<u>9,650</u>	<u>991</u>
Roads & streets..	<u>25,175</u>	<u>325</u>	<u>29</u>	<u>7,255</u>	<u>707</u>
Canals	<u>5,612</u>	<u>58</u>	—	<u>966</u>	<u>166</u>
Parks	<u>2,163</u>	<u>9</u>	—	<u>162</u>	<u>1</u>
Land adjustment.	<u>2,561</u>	<u>2,561</u>	<u>154</u>	<u>1,269</u>	<u>117</u>

(Continued)	1925		1926	
	Estimate	Actual disbursement	Estimate	Actual disbursement
Reconstruction				
Expenditure	<u>68,855</u>	<u>66,380</u>	<u>58,690,000</u>	<u>47,847,000</u>
Reconstruction				
of Tokyo	<u>61,463</u>	<u>60,241</u>	<u>53,519,000</u>	<u>38,517,000</u>
Roads & streets....	<u>50,581</u>	<u>50,251</u>	<u>47,193,000</u>	<u>28,403,000</u>
Canals	<u>4,861</u>	<u>2,829</u>	<u>4,680,000</u>	<u>1,969,000</u>
Parks	<u>2,968</u>	<u>2,057</u>	<u>1,183,000</u>	<u>1,373,000</u>
Land adjustment....	<u>3,053</u>	<u>5,103</u>	<u>468,000</u>	<u>6,771,000</u>
Reconstruction				
of Yokohama	<u>7,392</u>	<u>6,139</u>	<u>5,171,000</u>	<u>9,330,000</u>
Roads & streets....	<u>5,464</u>	<u>4,488</u>	<u>3,779,000</u>	<u>6,988,000</u>
Canals	<u>797</u>	<u>858</u>	<u>1,002,000</u>	<u>971,000</u>
Parks	<u>344</u>	<u>504</u>	<u>139,000</u>	<u>180,000</u>
Land adjustment....	<u>787</u>	<u>279</u>	<u>251,000</u>	<u>3,191,000</u>

(Continued)	1927		Expenditure 1923-1927 (Total)	Remainder
	Estimate	Actual disbursement		
Reconstruction				
Expenditure	<u>53,236,000</u>	<u>53,199,000</u>	<u>226,323,000</u>	<u>119,871,000</u>
Reconstruction of				
Tokyo	<u>46,293,000</u>	<u>51,011,000</u>	<u>197,623,000</u>	<u>109,056,000</u>
Roads & streets..	<u>40,514,000</u>	<u>38,531,000</u>	<u>158,455,000</u>	<u>99,004,000</u>
Canals	<u>3,849,000</u>	<u>2,394,000</u>	<u>8,715,000</u>	<u>19,855,000</u>
Parks	<u>1,603,000</u>	<u>2,086,000</u>	<u>9,640,000</u>	<u>2,260,000</u>
Land adjustment.	<u>277,000</u>	<u>8,000,000</u>	<u>20,813,000</u>	<u>12,063,000</u>
Reconstruction of				
Yokohama	<u>6,993,000</u>	<u>12,188,000</u>	<u>28,700,000</u>	<u>10,815,000</u>
Roads & streets..	<u>4,841,000</u>	<u>8,042,000</u>	<u>20,254,000</u>	<u>7,529,000</u>
Canals	<u>1,547,000</u>	<u>550,000</u>	<u>2,546,000</u>	<u>3,066,000</u>
Parks	<u>512,000</u>	<u>687,000</u>	<u>1,382,000</u>	<u>577,000</u>
Land adjustment.	<u>93,000</u>	<u>2,909,000</u>	<u>4,518,000</u>	<u>357,000</u>

INDEX

A

Academic titles, [231](#)
 Academy of Music, [234](#)
 Accidents, in aviation, [193](#), [195](#)
 Accident, in mines, [543](#)
 Active service, personnel of, [184](#)
 Actors, [359](#)
 Adjustment of farms, [490](#)
 Admiralties, [183](#)
 Advertisement post, [388](#)
 Advertisement tariff, [300](#)
 Age-limit for jud. officials, [279](#)
 Agrarian problems, [489](#)
 Agricultural credit, [489](#)
 Agricultural and Industrial
 Banks, [447](#)
 Agriculture, [489](#), ff.
 Aichi Univ. of Medicine, [230](#)
 Air temperature, [8](#)
 Alien landownership right, [51](#)
 Amakusa, rebellion, [20](#)
 American scholarship, [250](#)
 Amusements, [356](#)
 Anglo-Japanese Alliance, [26](#), [132](#)
 Animal epidemics, [500](#)
 Animal labor in tillage, [493](#)
 Annuity, [116](#)
 Anti-Japanese legislation, [140](#)
 Antimony, [537](#)
 Applied arts, [327](#)
 Aquiculture, [525](#)
 Arable land, [490](#)
 Architecture, [320](#)
 Architecture and earthquake,
 [375](#)
 Arms depots, [175](#)
 Army, distribution of, [176](#)
 Army education, [172](#)
 Arsenic, [537](#)
 Art exhibitions, [323](#)
 Art societies and galleries, [331](#)
 Artillery, [173](#)
 Artists to the Court, [325](#)
 Asaka, Prince, [56](#)
 Asano Shipbuild. Yard, [425](#)
 Ashikaga shogunate, [18](#)
 Ashikaga, Takauji, [18](#)
 Association football, [348](#)
 Atami, [37](#)
 Athletic grounds, leading, [352](#)

Atmospheric pressure, [7](#), [8](#)
 Automatic couplers, [401](#)
 Automobiles, [407](#)
 Aviation, [192](#) ff.
 Aviation records, [200](#)
 Aviation schools, [172](#), [192](#)

B

"Balu," [10](#)
 Balloon corps, [173](#), [193](#)
 Bamboo wares, [582](#)
 Bank notes, [445](#)
 Bank of Chosen, [448](#)
 Bank of Japan, [444](#), [447](#), [456](#),
 [460](#)
 Bank of Taiwan, [447](#)
 Banking crisis in 1927, [444](#)
 Banking Law, New, [445](#)
 Banking statistics, [450](#)
 Banks and Banking, [443](#) ff.
 Banks, amalgamation of, [445](#)
 Banks, assets of, [452](#)
 Banks, foreign, in Japan, [461](#)
 Banks, leading, ordinary and
 savings, [453](#)
 Banks, liabilities of, [452](#)
 Banks, ordinary, [450](#)
 Banks, principal, [446](#)
 Banks selling T.T. rate, [450](#)
 Banks, special, [446](#)
 Bankruptcy, [277](#)
 Barley, [495](#)
 Baseball, [346](#)
 Basket-ball, [349](#)
 Battle-cruisers, [188](#)
 Beans, [495](#)
 Beasts of game, [520](#)
 Beer, [571](#)
 Beer tax, [475](#)
 Beet-sugar, [568](#)
 Bio-chemical industry, [563](#)
 Bill-broking, [456](#)
 Birds of game, [520](#)
 Birth-rate, [44](#)
 Bismuth, [536](#)
 Black Current, [4](#), [11](#)
 Bleaching-powder, [565](#)
 Blind, Deaf & Dumb Schools,
 [223](#)
 Board of Marshals, [167](#)

- Bombardment of Kagoshima & Shimonoseki, [128](#)
 Bonin Is., [1](#)
 Boxer Trouble, [25](#)
 Boxing among military officers, [354](#)
 Boy scouts organization in Japan, [249](#)
 Brewery, [570](#)
 Brokers, stock, [591](#)
 Brushes, [582](#)
 Buddhism, [204](#), [208](#)
 Buddhist sects, [209](#)
 Buddhist temples, [210](#)
 Budget, [465](#) ff.
 Building industry, [577](#)
 Burial, [295](#)
 Business promotion, [587](#)
 Business tax, [474](#)
 Buttons, [582](#)
- C**
- Cabinet, [76](#)
 Cabinet ministers, [85](#), [119](#) ff.
 Cabinet changes, [87](#)
 Camphor, [470](#), [517](#)
 Caroline Is., [705](#)
 Cattle, Horned, [497](#)
 Caustic soda, [564](#)
 Celluloid, [574](#)
 Cement, [565](#)
 Census, [42](#), [45](#) ff.
 Censorship, [306](#)
 Central bank for co-operative societies, [460](#)
 Ceramics, [328](#), [565](#)
 Chambers of Commerce, [589](#)
 Changchun Conference, [148](#)
 Charity hospitals, [290](#)
 Charity Hospital, Tokyo, [291](#)
 Charter market, [421](#)
 Chess, [363](#)
 Chemical industry, [563](#)
 Chemulpo, [666](#)
 Chichibu, Prince, [53](#)
 Chip braids, [580](#)
 Chishima, [1](#)
 Chishima current, [4](#)
 "Choku-nin," [114](#)
 Chosen, [664](#) ff.
 Chosen, Administration of, [666](#)
 Chosen, Agriculture of, [672](#)
 Chosen, Annexation of, [26](#)
 Chosen, Bank of, [448](#)
 Chosen, banks & banking, [671](#)
 Chosen, Education, [677](#)
 Chosen, Gov't.-Gen., [667](#)
 Chosen, Finance, [668](#)
 Chosen, Fishery, [674](#)
 Chosen, Forestry, [675](#)
 Chosen, Garrison, [679](#)
 Chosen, Industries & Wages, [675](#)
 Chosen, Judicature, [678](#)
 Chosen, Local self-government, [667](#)
 Chosen, Mining, [673](#)
 Chosen, Public works, [670](#)
 Chosen, Railways, [679](#)
 Chosen, Religion, [678](#)
 Chosen, Trade, [671](#)
 Chosen Water Power Elec. Co., [676](#)
 Christianity, [19](#), [204](#), [211](#)
 Christian independence movement, [215](#)
 Chuo (Central) Univ., [231](#)
 Cinema halls, [361](#)
 City planning law, [609](#)
 Civic corporation, finance of, [483](#)
 Civil and military service, [113](#) ff.
 Civil cases, [269](#), [270](#)
 Civil procedures, costs in, [268](#)
 Civilian aviation, [197](#)
 Clearing houses, [458](#)
 Climate, [6](#)
 Clocks, [580](#)
 Coal, [537](#), [603](#)
 Coal, price of, [603](#)
 Coast defence ships, [189](#)
 Coast protection, [371](#)
 Coastwise service, [408](#)
 Cocaine, [292](#)
 Cocoons, [502](#), [507](#)
 Coinage, [459](#)
 Coins in circulation, [459](#)
 Colonization Bank, Hokkaido, [447](#)
 Collegiate institutions, [235](#)
 Commercial Museum, [595](#)
 Common dining halls, [652](#)
 Communications Dept., [121](#)
 Communist affair in Japan, [271](#)
 Competitive entrance examination, [242](#)
 Compulsory education, [241](#)
 Confucianism, [204](#)
 Conscription, [167](#)
 Conscription Insurance, [440](#)
 Constitution, [67](#) ff.
 Construction, [365](#) ff.

Construction Regulation, [379](#)
 Continuing expenditures, [487](#)
 Conventional tariff, [620](#)
 Convertible note system, [459](#)
 Co-operative societies, [265](#)
 Copyrights, [305](#)
 Coral fishery, [528](#)
 Copper, [534](#), [601](#)
 Copper, price of, [601](#)
 Cotton fabrics, [550](#)
 Cotton spinning, [546](#)
 Cotton yarns, [547](#), [597](#)
 County, [107](#)
 Court at Kyoto, [17](#)
 Court, Imperial, [53](#) ff.
 Court Martial Law, [168](#)
 Court music, [356](#)
 Court of Administrative Litigation, [122](#)
 Court ranks, [66](#)
 Courts, composition of, [276](#)
 Credit associations, [455](#)
 Cremation, [295](#)
 Criminal cases, [278](#), [287](#)
 Crops, special and minor, [496](#)
 Crown Prince, [29](#)
 Cruisers, [188](#)
 Curio markets, [334](#)
 Currency system, [459](#)
 Customs revenue, [644](#)
 Customs Tariff, [611](#) ff.
 Customs Tariff Law, [608](#) ff.
 Cyclones, [7](#)

D

Dailies, [300](#)
 Dairen, [698](#)
 Dairen Conference, [148](#)
 Dairy, [500](#)
 Dance, [356](#)
 Date, Masamune, [19](#)
 Deaths, [43](#)
 Debenture loans, [485](#)
 Debts, national, [479](#)
 Decorations, [64](#)
 Deep sea catches, [526](#)
 Dentists, [290](#)
 Deposit account, [468](#)
 Deshima, [127](#)
 Designs, [336](#), [431](#)
 Diet, [23](#), [70](#), [77](#), [92](#)
 Diesel engines, [559](#)
 Diplomacy, [126](#) ff.
 Diplomatic & consular service, [156](#) ff.

Distribution of trade, [638](#)
 Divorces, [43](#)
 Docks, [423](#)
 Dojinkai, [291](#)
 Domestic money orders, [387](#), [389](#)
 Domestic novels, [310](#)
 Drama, [315](#)
 Drainage, [371](#)
 Dutch traders, [127](#)
 Dwelling House Association Law, [653](#)
 Dye-stuffs, [569](#)
 Dynamos, [561](#)

E

Earthquake, [30](#) ff.
 Earthquake damage to public works, [372](#)
 Earthquake, destructive, of Tokyo and Tajima, [31](#) ff.
 Earthquake-fire gratuity payment, [442](#)
 Earthquake notes, [445](#)
 Earthquake proof buildings, [35](#)
 Education for women, [225](#)
 Educational institutions, [221](#)
 Election Law, [79](#)
 Electric apparatuses, [556](#), [559](#)
 Electric industry, [553](#)
 Electric light, [556](#)
 Electricity, rate of, [557](#)
 Electricity, supply of, [556](#)
 Electoral system, [78](#)
 Electro-chemical industry, [557](#)
 Electrification of railways, [404](#)
 Eleemosynary work, [269](#)
 Elementary schools, [222](#)
 Embargo on gold and silver, [486](#)
 Emigrants, [48](#)
 Emperor, [53](#), [74](#)
 Enamelled wares, [582](#)
 Epidemic laboratories, [293](#)
 Epidemic mortality, [295](#)
 Eruption on Tokachidake, [36](#)
 European War, Japan in, [27](#)
 Exchanges, [589](#)
 Exchange Law, [590](#)
 Excise on sugar, [476](#)
 Excise on woollen and silk fabrics, [476](#)
 Expatriation of Japanese, [52](#)
 Expenditure, State, [464](#), [465](#), [466](#)
 Export Guilds Laws, [625](#)

F

Factory labor, [253](#)
 Factory law, [256](#)
 Factories and employees, [545](#)
 Fans and folding fans, [583](#)
 Far Eastern Olympic Games, [354](#)
 Farm products, [494](#)
 Fauna, [12](#)
 Fats, [576](#)
 Fencing, [246](#)
 Fertilizers, Artificial, [562](#)
 Field artillery, [173](#)
 Field athletics, [352](#)
 Finance, [463](#) ff.
 Finance, contraction policy of, [464](#)
 Finance of Hokkaido, Prefectures, etc., [481](#)
 Financial adjustments, [463](#)
 Financial expansion, [463](#)
 Fires, [287](#)
 Fires, Historic, in Japan, [441](#)
 Fish oil, [576](#)
 Fishermen, [523](#)
 Fishery, catches, [524](#)
 Fishery, encouragement of, [522](#)
 Fishery, economic position of, [524](#)
 Fishery Institute, [238](#)
 Fishery in Hokkaido, [525](#)
 Fishes, [13](#)
 Fishing craft, [523](#)
 Fleet Admirals, [167](#)
 Flour, [572](#), [600](#)
 Flour, price of, [601](#)
 Flora, [13](#)
 Flying regiments, [192](#)
 Football, [348](#)
 Foreign Affairs, Dept. of, [120](#)
 Foreign banks, [461](#)
 Foreign exchange business, [449](#)
 Foreign insurance cos., [442](#), [446](#)
 Foreign Language Schools, [234](#)
 Foreign loans, [480](#), [486](#)
 Foreign mail matters, [389](#)
 Foreign parcel rates, [390](#)
 Foreign residents in Japan, [50](#)
 Foreign students studying in Japan, [248](#)
 Foreign trade, [602](#) ff.
 Foreign trade situation, [645](#)
 Foreign visitors to Japan, [50](#)
 Foreigners, legal status of, [51](#)
 Forestry, [512](#) ff.
 Forest, area of, [513](#)

Forest, adjustment of, [514](#)
 Forest, financial aspects of, [515](#)
 Formosa (vide Taiwan)
 Formosan expedition, [22](#), [129](#)
 Foul matters, removal of, [293](#)
 Foundlings, [287](#)
 Fox farming, [527](#)
 Freedom of discussion, [306](#)
 Freight market, [421](#)
 Freight rate, open sea lines, [420](#)
 Frost, killing, [10](#)
 Fruits, output of, [501](#)
 Fuel question, [542](#)
 Fuji, Mt., [2](#)
 Fuji pongee, [550](#)
 Fujiwara, the family, [17](#)
 Fur animals, [527](#)
 Fusan, [6](#)
 Fushimi, Prince, [54](#)

G

Galleries, art, [331](#)
 Game law, [520](#)
 Garden plants, [13](#)
 Gas industry, [558](#)
 General election, [91](#)
 General Staff Office, [123](#)
 "Genro," [31](#)
 Genji, the family, [17](#)
 Genroin (Senate), [67](#)
 Genroku designs, [336](#)
 Girls' High Schools, [225](#)
 Glass, [565](#)
 Gobang, [362](#)
 Godaigo Tenno, [18](#)
 Gold, [533](#)
 Golden Kite, Order of, [65](#), [116](#)
 Golf, [347](#)
 Government Rlys, [396](#)
 Government Rlys, approved foreign makers, [402](#)
 Government Rlys, finance, [397](#)
 Government Rlys, gauge, [400](#)
 Government Rlys, mileage, [396](#)
 Government Rlys, rolling stock, [399](#)
 Government Rlys, stores, [402](#)
 Grains, [495](#)
 Gramophones, [339](#)
 Grand Order of Merit, [65](#)
 Graphite, [537](#)
 Guilds of staple commodities, [594](#)
 Gunboats, [189](#)
 Gunnery Sch., [186](#)

INDEX

H

- Hakone, [37](#)
- Handkerchiefs, silk, [632](#)
- "Hannin," [113](#)
- Harbors and bays, [5](#)
- Harbors open to commerce, [6](#)
- Harbor works, [368](#)
- Hardware, enamelled, [582](#)
- Hats, [574](#)
- Health of students, [241](#)
- Heavy artillery, [173](#)
- Heavy Artillery Sch., [173](#)
- Helke, the family, [17](#)
- Hemp, [636](#)
- Hemp braids, [580](#)
- Hempen spinning, [548](#)
- Hideyoshi, [19](#)
- Higashi-Kuni, Prince, [57](#)
- Higashi-Fushimi, Prince, [55](#)
- High Schools, [225](#)
- Higher Agricultural & Forestry Sch., [232](#)
- Higher Commercial Sch., [233](#)
- Higher Mercantile Marine Sch., [233](#)
- Higher Normal Sch., [237](#)
- Higher Sericultural Sch., [233](#)
- Higher Technical Schools, [233](#)
- Highest tax payers, [97](#)
- Historic fires in Japan, [441](#)
- History, Outline of Japanese, [16](#) ff.
- Hokkaido, [1](#)
- Hokkaido, finance of, [481](#)
- Hokkaido, fishery in, [525](#)
- Hokkaido Imp. Univ., [228](#)
- Hokoto, [1](#)
- Holidays of laborers, [255](#)
- Home Affairs, Dept. of, [120](#)
- Honshu, [1](#)
- Horned cattle, [497](#)
- Horse, [497](#)
- Horse race, [342](#)
- Horse riding, [342](#)
- Horticulture, [501](#)
- Hosiery, [581](#)
- Hospitals, [290](#)
- Hot springs, [37](#) ff.
- House of Peers, [89](#), [92](#)
- House of Representatives, [89](#), [97](#)
- Housing of Laborers, [260](#)
- Housing question, [653](#)
- Humanitarians, [313](#)
- Humidity, [11](#)
- Hypothec Bank of Japan, [447](#)
- I-i Kamon-no-kami, [20](#)
- Iki Channel, [5](#)
- Immigration of Japanese labor, [27](#)
- Imperial Aero Association, [197](#)
- Imperial Academy of Japan, [232](#)
- Imperial Court, [53](#) ff.
- Imperial Fleet, [186](#)
- Imperial House Law, [57](#) ff.
- Imperial Household Dept., [120](#)
- Imperial Library, [243](#)
- Imperial Mausolea, [64](#)
- Imperial Property Law, [63](#)
- Imperial Universities, [227](#)
- Imports, Excess of, [606](#)
- Imports and exports, [627](#)
- Import duty in Chosen, [619](#)
- Income tax, [473](#)
- Industrial Bank of Japan, [447](#)
- Industrial property, [428](#)
- Infantry School, [173](#)
- Infectious diseases, [295](#)
- Inland Sea, [5](#)
- Insolvency, [277](#)
- Insulated electric wires, [583](#)
- Insurance, [434](#) ff.
- Insurance, Conscription, [440](#)
- Insurance, Fire, [439](#), [442](#)
- Insurance, Life, [434](#), [436](#), [439](#)
- Insurance, Marine, [441](#), [442](#)
- Insurance, Property, [434](#), [437](#)
- Insurance, Statistics on, [438](#)
- Intellectual games, indoor, [361](#)
- Intensive cultivation, [488](#)
- Interest, rate of, [456](#)
- International cable service, [382](#)
- International exchange of art exhibitions, [333](#)
- International Labor Conference, [257](#)
- International money orders, [387](#), [390](#)
- International radio service, [383](#)
- International telegraph rates, [392](#)
- International traffic arrangements, [405](#)
- International wars and indemnity, [478](#)
- Intervention of the Three Powers, [182](#)
- Invalid soldiers, asylums for, [269](#)
- Inventions, encouragement of, [433](#)

I

Investment in mining business, [542](#)
 Invisible trade, [644](#)
 Iron, [535](#), [601](#)
 Iron, price of, [602](#)
 Iron sulphide, [536](#)
 Irrigation, [371](#)
 Ishikari Bay, [5](#)
 Isinglass, [575](#)
 Itagaki, Taisuke, [21](#), [81](#)
 Ito, Prince, [20](#), [26](#)
 Iwakura's (Prince) Treaty revision mission, [22](#)
 Iyeyasu, Tokugawa, [19](#)
 Izumibashi Charity Hospital, [291](#)

J

Japan Amateur Athletic Association, [340](#)
 Japan Amateur Rowing Association, [350](#)
 Japan and Mr. Kellogg's anti-War Pact, [155](#)
 Japan and the League of Nations, [155](#)
 Japan and the World War, [141](#)
 Japan-China through traffic service, [406](#)
 Japan Lawn-Tennis Association, [349](#)
 Japan Tourist Bureau, [410](#)
 Japanese Alps, [2](#), [344](#)
 Japanese Arc, [31](#)
 Japanese spinning mills in China, [546](#)
 Japanese emigrants, [49](#)
 Japan's investment in China, [480](#)
 Japanese going abroad, [48](#)
 Japanese painting, [324](#)
 Japanese residing abroad, [46](#)
 Japanese shipping, allocation of, [415](#)
 Japanese shipping, features of, [412](#)
 Jesuits missionaries, [211](#)
 Jimmu, the Emperor, [16](#)
 Jingu Kogakkan, [238](#)
 Journalism, [298](#)
 Judicature, [72](#)
 Judicial system, [274](#)

Judo or Jujitsu, [246](#)
 Jury system, [279](#)
 Justice, Dept. of, [121](#)
 Juvenile Courts, [279](#)

K

Kabuki, [358](#)
 Kagoshima, rebellion of, [22](#)
 Kamakura period, [17](#)
 Kanazawa University of Medicine, [230](#)
 Kan-in, Prince, [54](#)
 Kano School of painting, [322](#)
 Karafuto, [694](#) ff.
 Kawasaki Shipbuilding Yard, [424](#), [427](#)
 Kelo University, [230](#)
 Keijo Imp. Univ., [228](#)
 Kensei-kai, [85](#)
 Kii, Strait of, [5](#)
 Kindergartens, [223](#)
 Kinkai Yusen Kaisha, [419](#)
 Kirin-Changchun Rly, [704](#)
 Kiso forestry, [514](#)
 Knitted goods, export of, [633](#)
 Kobe, [661](#)
 Kokusai Kisen Kaisha, [420](#)
 Korea (vide Chosen)
 Korean annexation, [26](#)
 Korean question, [22](#)
 Korin designs, [337](#)
 Kumamoto Univ. of Medicine, [230](#)
 Kuni, Prince, [55](#)
 Kuriles, [1](#), [22](#)
 Kuropatkin, Gen., [25](#)
 Kusatsu, [37](#)
 Kusunoki Masashige, [18](#)
 Kyogen, [358](#)
 Kyoto, [659](#)
 Kyoto Imp. Univ., [228](#)
 Kyushu, [1](#)
 Kyushu Imp. Univ., [228](#)
 Kwantung Leased Territory, [698](#) ff.
 Kwantung Garrison, [700](#)
 Kwantung Government, [122](#), [698](#)
 Kwantung, Industry, [704](#)

L

Labor disputes, [260](#)
 Labor organizations, [257](#)

- Laborers, number of, [252](#)
 Lacquer, [575](#)
 Lacquer art, [330](#)
 Lady novelists, [310](#)
 Lakes, [3](#)
 Land (arable), area of, [490](#)
 Land holding, [488](#)
 Landownership right, alien, [51](#)
 Land tax, [473](#)
 Land (arable), price of, [492](#)
 Language teaching, [224](#)
 Lawn tennis, [348](#)
 Lead, [536](#)
 Leading shipowners, [415](#)
 Leading steamship companies, [418](#)
 Leather, [574](#)
 Leper hospitals, [292](#)
 Liaotung Peninsula, [132](#)
 Libraries, [243](#)
 Licenses for pilots, [421](#)
 Licenses for teachers, [248](#)
 Light-houses, [421](#)
 Liman Current, [4](#)
 Literature, modern, [308](#) ff.
 Loans, domestic and foreign, [486](#)
 Loans, foreign, floated by private cos., [486](#)
 Local assemblies, [117](#)
 Local government, [106](#)
 Local loans, [484](#)
 Local railways, [404](#)
 Local taxes, [473](#)
 Local Young Men's League, [268](#)
 Lower press rates to U.S.A., [383](#)
 Luchu, [1](#)
 Lunatic asylums, [270](#)
 Luxury tariff, [623](#)
- M**
- Machine guns, [174](#)
 Machinery, [634](#), [637](#)
 Mail matters, [385](#), [387](#)
 Mail service, overseas, [416](#)
 Maizuru, naval port of, [183](#)
 Makurano-soshi, [17](#)
 Mandate, over South Sea Is., [27](#)
 Mannyō-shū, [17](#)
 Manures, [493](#)
 Marathon running, [352](#)
 Marine products, [524](#)
 Marlana Is., [705](#)
 Marine Observatory, Imp., Kobe, [422](#)
 Market rate, Tokyo & Osaka, [456](#)
 Marshal Isl., [705](#)
 Matches, [569](#)
 Mats, [581](#)
 Meat-preserving, [500](#)
 Mechanical industry, [559](#) ff.
 Medical license exam., [248](#)
 Medical opium, [232](#)
 Medical practitioners, [290](#)
 Medicine, [289](#) ff.
 Meiji period, [318](#)
 Meiji literature, [308](#)
 Meiji, the Emperor, [27](#)
 Meiji University, [231](#)
 Menthol crystal, [577](#)
 Merchandise exchanges, [589](#)
 Mercantile agencies, [594](#)
 Mercantile Marine School, Higher, [233](#)
 Mercury, [537](#)
 Metal veins, [531](#)
 Middle schools, [224](#)
 Mileage, of railways, [396](#)
 Military arsenals, [175](#)
 Military aviation, [192](#)
 Military Cadets' Sch., [173](#)
 Military Limitation, [179](#)
 Military Preparatory Sch., [173](#)
 Military Staff College, [173](#)
 Military training in schools, [220](#)
 Mineral production, [531](#) ff.
 Mineral springs, [37](#) ff.
 Mines, principal, [537](#)
 Mine workers, number of, [542](#)
 Mining, [530](#) ff.
 Mining School, [233](#)
 Mitsubishi Shipbuild. Yd., [424](#)
 Modern stage art, [358](#)
 Molybdenum, [537](#)
 Momoyama style, [337](#)
 Money orders, [387](#), [389](#)
 Monetary organs for poorer classes, [454](#)
 Mongol armada, [18](#)
 Monopolies, [470](#)
 Monsoons, [7](#)
 Mokpo, [6](#)
 Moral education, [245](#)
 Morphine, [292](#)
 Motion pictures, [360](#)
 Motor Car School, Army, [173](#)
 Motor ships, [426](#)
 Mountains, [1](#), [2](#)
 Mountain artillery, [173](#)
 Mountain peaks, principal, [1](#)
 Mounted machine guns, [174](#)

Mountaineering, [344](#)
 "Mujin," [455](#)
 Mukden, battle of, [25](#)
 Mulberry plantations, [508](#)
 Municipal finances, [650](#)
 Municipal system, [108](#)
 Municipal tramways, [407](#)
 Murasaki-Shikibu, [17](#)
 Museums, [244](#)
 Museums, Commercial, [595](#)
 Music, [338](#), [356](#)
 Muslin-de-Laine, [552](#)
 Mutual aid association, [265](#)

N

Nagoya, [662](#)
 Nanryo Yusen Kaisha, [419](#)
 Naruto, [5](#)
 Nashimoto, Prince, [56](#)
 National Assembly, Edict for creation, [23](#)
 National debts, [479](#)
 National defence, [167](#)
 National sports, [340](#)
 National taxes, [473](#)
 National treasures, [334](#)
 National Temperance League of Japan, [216](#)
 National Treasure Commission, [334](#)
 National wealth, [469](#)
 Naturalism, [311](#)
 Naturalization, [52](#)
 Nationalization of railways, [394](#)
 Naval arsenals, [183](#)
 Naval aviation, [194](#)
 Naval College, [186](#)
 Naval Dept., [124](#)
 Naval Education, [186](#)
 Naval Engineering College, [186](#)
 Naval expenditure, [182](#)
 Naval Ports, [183](#)
 Naval program, [181](#)
 Naval Staff Board, [124](#)
 Naval Stations, [125](#)
 Navigation, [421](#)
 Near Sea Service, [416](#)
 New Treaty with Germany, [155](#)
 News agencies, [304](#)
 Newspapers, English, [301](#)
 Niigata, [7](#)
 Nikolalevsk massacre, [28](#)
 Nippon Yusen Kaisha, [418](#)
 Nisshin Kisen Kaisha, [418](#)

"No" drama, [356](#)
 Non-commissioned officers, [171](#)
 Non-metallic deposits, [531](#)
 Noto Peninsula, [5](#)
 Normal schools, Prefectural and Higher, [236](#)

O

Observatory, Marine, Kobe, [422](#)
 Ocean currents, [4](#)
 Oda, Nobunaga, [18](#)
 Oga Peninsula, [5](#)
 Ogasawara Is., [1](#)
 Oil exploitation in Karafuto, [149](#), [697](#)
 Oil, petroleum, [540](#)
 Oils, [576](#)
 Old masterpieces, [334](#)
 Ominato, [6](#)
 Oriental Development Co., [680](#)
 Orphanages, [271](#)
 Osaka, [657](#)
 Osaka Iron Works, [425](#)
 Osaka Shosen Kaisha, [418](#)
 Oversea Navigation Subsidy Law, [416](#)
 Oversea mail service, [416](#)

P

Painters of note, Meiji Era, [335](#)
 Painting, [322](#)
 Paper, [572](#)
 Paper money in circulation, [459](#)
 Parcel post, [389](#)
 Parcels transmitted, [386](#)
 Passports issued, [48](#)
 Patents, [430](#)
 Patent medicine, [292](#)
 Pawn-broking, [454](#)
 Paymaster School, [173](#)
 Peace Delegation to Paris, [27](#), [142](#)
 Peace Police Regulation, [284](#)
 Peace Preservation Law, [281](#)
 Peace standing of the Army, [175](#)
 Pearl fishery, [525](#)
 Peerage, [65](#)
 Peers' School, [238](#)
 Pelagic fishing, [526](#)
 Pensions & annuities, [116](#)
 Peppermint, [576](#)

- Periodicals, 302
 Perry, Commodore, 19
 Peruvian Slave Ship Affair, 129
 Pescadores, 1
 Petroleum, 540
 Pharmaceutists, 290
 Physical culture, 240
 Pilots, 421
 Placer gold, 533
 Plains, in Japan Proper and Korea, 3
 Plants, principal, of Japan, 13
 Police, 283
 Police offences, 283
 Political parties, 82
 Politics, 74
 Population, 41
 Population, of cities, 41, 45
 Population, legal, 42
 Population, of prefectures, 44
 Population, urban & rural, 46
 Porcelain and pottery, 565
 Portsmouth Treaty, 133
 Post, 380
 Post & telegraph offices, 385
 Post & telegraph receipts, 387
 Post & telegraph service expenses, 387
 Postal savings, 384
 Postal savings deposits, 386
 Posthumous honours, 66
 Post office life annuities, 437
 Potatoes, 495
 Potteries, export of, 633
 Poultry, 499
 Precipitation, 9, 10, 11
 Prefectures (ken), 107, 111
 Prefectures, finance of, 481
 Press, 298
 Press Association, 304
 Press circulation, 299
 Press law, 299
 Press statistics, 300
 Prices of commodities, 595
 Price of shares, 591
 Price of ships, newly built, 423
 Primary education, 222
 Prisons and prisoners, 280 ff.
 Private railways, 403
 Private universities, 231
 Privy Council, 75
 Privy Councillors, 119
 Profession of Univ. graduates, 229
 Professional education, 232
 Professional story-tellers, 360
 Progress of reconstruction, 707 ff.
 Protestant Church, 211
 Public markets, 652
 Public universities, 230
 Public works, 365
 Publications, 305
 Publications by subscription, 305
 Publishers crazy activity in 1927, 306
 Pulp, 518, 574
- ## Q
- Quarantine, 296
 Quotations (see Price)
- ## R
- Radio broadcasting, 383
 Radio service, 383
 Radio telegrams, 383
 Railways, 394
 Railway Construction Law, 395
 Railway, Dept. of, 122
 Railway finance, 397
 Railway, general statistics, 395
 Railway, passenger and goods rates, 395
 Railway Regiments, 174
 Rains, 9, 10
 Raw silk, output of, 508
 Raw silk, price of, 599
 Raw silk trade, 598
 Rayon industry, 549
 Real estate, rate on, 456
 Recent labor dispute, 260
 Recent relations with China, 149
 Reclamation work, 489
 Regency, 59
 Registration fees, 473
 Reinsurance business, 440
 Relations with France, 138
 Relations with the Soviet Russia, 146
 Relations with the United States, 139
 Relief for paupers, 289
 Relief to sufferers from natural calamities, 270
 Religion at schools, 219
 Rent of land, 492

- Restoration of Meiji, [21](#), [67](#)
 Retiring allowances, [118](#)
 Revenue and expenditures,
 local, [480](#) ff.
 Revenue and expenditure, State,
 [464](#) ff.
 Rice, [494](#)
 Rice, price of, [494](#), [596](#)
 Rice exchange, [590](#), [591](#), [596](#)
 River works, [367](#), [368](#)
 Rivers, in Japan, Korea, For-
 mosa, [2](#), [2](#)
 Roads, [366](#)
 Robbery, [286](#)
 Rolling stock, [399](#)
 Roman Catholic Church, [212](#)
 Romantic movement, in paint-
 ing, [323](#)
 Rowing, [350](#)
 Royal House of Korea, [57](#)
 Royalty, [305](#)
 Rubber, [575](#)
 Rugby football, [348](#)
 Russia in Korea, [136](#)
 Russia's invasion of Manchuria,
 [136](#)
 Russo-British rivalry, [134](#)
 Russo-Japanese conferences,
 [147](#)
 Russo-Japanese Convention,
 [148](#)
 Russo-Japanese War, [25](#), [135](#)
 Ryukyu, [1](#)

S

- Sacred dance, [356](#)
 Saga rebellion, [22](#)
 Saghalien (vide Karafuto)
 Saghalien, evacuation of, [28](#)
 Saigo, the Elder, [22](#)
 Saigo rebellion, [22](#)
 Sailing vessels, [412](#)
 Saisei-kai, [290](#)
 Sake, [570](#)
 Sake tax, [475](#)
 Sakurajima, [5](#), [36](#)
 Salaries, scale of, [113](#)
 Salt, [470](#)
 Salt industry, [527](#)
 Salvage work, [422](#)
 Salvation Army, [217](#)
 "Samisen," [338](#)
 Sanitary works, [370](#)
 Sanitation, [292](#)
 Satsuma-yaki, [329](#)
 Savings banks, [443](#), [450](#)
 Sawing business, [518](#)
 Schoolboy question in Califor-
 nia, [139](#)
 School hygiene, [241](#)
 Scientific Research Council, [239](#)
 Sculpture, [321](#), [327](#)
 Seamen, characteristics of
 Japanese, [413](#)
 Secondary education, [224](#)
 Seismic record in Japan, [33](#), [34](#)
 Seismic value of buildings, [376](#)
 Seismological investigation in
 Japan, [34](#)
 Seiyu-Honto, [83](#)
 Seiyu-kai, [83](#)
 Sericulture, [501](#) ff.
 Sericultural economy, [509](#)
 Sericultural households, [507](#)
 Sericultural institute, [509](#)
 Sewerage, [374](#)
 Shantung treaty, [149](#)
 Share market, [592](#)
 Sheep, [498](#)
 Shikoku, [1](#)
 Shimonoseki Treaty, [132](#)
 Shin-nin, [114](#)
 Shintoism, [206](#)
 Shinto shrines, and sects, [208](#)
 Shiobara, [38](#)
 Shipbuilding industry, [423](#)
 Shipbuilding, Law for En-
 couraging, [423](#)
 Shipbuilding yards, principal,
 [424](#)
 Shipping & Shipbuilding, [411](#) ff.
 Shipping sales during 1926, [415](#)
 Shipping subsidies, [413](#)
 Shipping union, [427](#)
 Shipowners, [415](#)
 Shippo, [329](#)
 Ships, classified, [414](#)
 Ships launched, [423](#)
 Shipwrecks, [421](#)
 Shipyards, [423](#)
 Shogun Keiki, the last, [20](#)
 Shosoin, [17](#)
 Shotoku, Prince, [16](#)
 Siberian Expedition, [27](#)
 Silk and hemp spinning, [548](#)
 Silk conditioning, [599](#)
 Silk exchange, [590](#)
 Silk fabrics, [550](#)
 Silk reelers, [508](#)
 Silk spinning, [548](#)
 Silk, floss, [506](#)

Silk, waste, 506
 Silk worm eggs, [504](#), [506](#), [508](#)
 Silver, [538](#)
 Sino-Japanese agreements, [150](#)
 Sino-Japanese negotiations, [149](#)
 Sino-Japanese postal service, [391](#)
 Sino-Japanese War, [24](#), [130](#)
 Six premier cities, [649](#) ff.
 Skating, [351](#)
 Skiing, [351](#)
 Slaughtering, returns of, [499](#)
 Soaps, [577](#)
 Social Bureau, [264](#)
 Soda-ash, [563](#)
 Social Problems and Facts, [263](#) ff.
 Social works in cities, [651](#)
 "Sonin," [114](#)
 Sonno-joi agitation, [20](#)
 South Manchuria Rly, [701](#) ff.
 South Sea Islands, [705](#) ff.
 Soy, [571](#)
 Special accounts, [466](#)
 Special corps, Army, [173](#)
 Specie hoarded abroad, [481](#)
 Speed swimming, [344](#)
 Spinning, [546](#) ff.
 Sports, [340](#)
 Stage art, [356](#)
 Standing army, [124](#)
 Standing force, strength of, [175](#)
 Staple commodities, movement of, [596](#) ff.
 State Industrial life insurance, [437](#)
 State monopolies and undertakings, [469](#)
 State universities, [227](#)
 Steamship companies, Leading, [418](#)
 St. Luke's International Hospital, [291](#)
 Stock breeding, [497](#)
 Stock exchange, [591](#)
 Story-tellers, [360](#)
 Strata, distribution of, [531](#)
 Straw braids, [580](#)
 Strikes, [261](#)
 Students studying abroad, [248](#)
 Submarines, [192](#)
 Subsidies for steamship service, [417](#)
 Succession & inheritance tax, [476](#)
 Sugar, [586](#)
 Sugar excise, [476](#)

Sugar, leading cos., [568](#)
 Sugar, price of, [603](#), [604](#)
 Suicides, [285](#)
 Sulphur, [537](#)
 Supreme Council of War, [167](#)
 Supreme Court, [274](#)
 Surgery School, [173](#)
 Sweet potatoes, [495](#)
 Swimming, [342](#)
 Syndicate banks, [448](#)

T

Taihoku Imp. Univ., [229](#)
 Taiwan, [682](#) ff.
 Taiwan, Aborigines, [684](#)
 Taiwan, Agriculture, [688](#)
 Taiwan, Camphor, [691](#)
 Taiwan, Education, [686](#)
 Taiwan, Finance, [685](#)
 Taiwan, Fishery, [688](#)
 Taiwan Forestry, [687](#)
 Taiwan, Justice, [686](#)
 Taiwan, Local Administration, [684](#)
 Taiwan, Mining, [689](#)
 Taiwan, Opium, [691](#)
 Taiwan, Public works, [692](#)
 Taiwan, Railways, [693](#)
 Taiwan, Sugar industry, [689](#)
 Taiwan, Tea, [690](#)
 Taiwan, Tobacco, [691](#)
 Taiwan, Trade, [692](#)
 Takamatsu, Prince, [53](#)
 Takarazuka Opera House, [359](#)
 Takauji, Ashikaga, [18](#)
 Tariff revision, [606](#), [607](#)
 Tax burdens, in cities, [650](#)
 Taxation, [771](#) ff.
 Taxation, statistics on, [477](#) ff.
 Taxes, [472](#) ff.
 Taxes, arrears in, national and local, [478](#)
 Taxes, per capita, [478](#)
 Tea, [510](#)
 Teachers' license examinations, [248](#)
 Technical education, [232](#)
 Telegrams, [385](#)
 Telegraph, [381](#), [388](#)
 Telegraph rate to Formosa & Korea, etc., [388](#)
 Telephone, [381](#), [384](#)
 Telephone subscribers, [384](#)
 Temperature, [9](#)

Tenancy disputes, [264](#)
 Textile fabrics, [330](#)
 Textile industry, [549](#) ff.
 Theatres, [360](#)
 Through traffic with China, [406](#)
 Through traffic with Manchuria, [405](#)
 Tides, [5](#)
 Tientsin Treaty, [131](#)
 Tillage land, statistics on, [490](#)
 Timbers, demands & supply, [517](#)
 Timbers, foreign, [519](#)
 Timbers, principal, [516](#)
 Tin, [536](#)
 Tobacco, [470](#)
 Tohoku Imperial Univ., [228](#)
 Toilet articles, [583](#)
 Tokaido Line, [404](#)
 Tokugawa shogunate, [19](#)
 Tokyo Blind School, [224](#)
 Tokyo Charity Hospital, [291](#)
 Tokyo City, [654](#) ff.
 Tokyo Deaf & Dumb School, [224](#)
 Tokyo Imperial Univ., [227](#)
 Tokyo Univ. of Commerce, [229](#)
 Torijima, [36](#)
 Torpedo School, [186](#)
 Toyama School, [173](#)
 Toyo Kisen Kaisha, [418](#)
 Toys, [579](#)
 Trachoma, [295](#)
 Track athletics, [352](#)
 Trade mark, [431](#)
 Trade situation, [584](#)
 Trade Unions, [251](#)
 Training schools for teachers, [236](#)
 Tramp steamers, [419](#)
 Tramways, [367](#), [407](#)
 Trapplst, [213](#)
 Trawling, [526](#)
 Treaties, Revision of, [23](#)
 Treaty Revision, [24](#)
 Treaty, four powers on the Pacific, [135](#)
 Trust business, [457](#)
 Tsinan affair, [151](#)
 Tsingtao Campaign, [27](#)
 Tsugaru Strait, [5](#)
 Tsushima current, [5](#)
 Tsushima Strait, [4](#), [10](#)
 Tsushima Is., [5](#), [128](#)
 Tuberculosis, [294](#)
 Tungsten, [587](#)
 Tuscarora, [4](#)
 Typhoons, [7](#)

U

Ukiyoye, [322](#), [325](#)
 Umbrellas, export of, [634](#)
 Unemployment, [259](#)
 University education, [227](#)
 Universities of Medicine, [230](#)
 Unnatural deaths, [287](#)
 Unzen, [38](#)
 Upper House Reform, [80](#)
 Uraga dockyard, [425](#)
 Usui Pass, [405](#)
 Utal, [338](#)
 Utility models, [430](#)

V

Vaccination, [295](#)
 Venereal diseases, prevention of, [296](#)
 Vessels, import dues on, in Kwantung, [413](#)
 Volcanic Bay, [6](#)
 Volcanic ranges, [30](#)
 Volcanoes, [80](#), [36](#)
 Volley-ball, [350](#)
 Volunteers, Army, [180](#)
 Volunteers, Navy, [184](#)

W

Wages of laborers, [254](#)
 War, Dept. of, [123](#)
 War, Great, [27](#)
 Warehousing business, [593](#)
 Warships, list of, [188](#)
 Waseda Univ., [231](#)
 Washington Conference, [29](#), [144](#)
 Watches, [580](#)
 Water power, [554](#)
 Waterworks, [374](#)
 Waxes, [576](#)
 Weaving, [549](#) ff.
 Western books, [306](#)
 Western painting, [325](#)
 Western sports, [346](#)
 Wet days, average No. of, [12](#)
 Whaling, [526](#)
 Wheat, [495](#)
 Wicker works, [588](#)
 Wind, [6](#)
 Wind, prevailing, direction of, [7](#)
 Winter sports, [351](#)

Wireless telegraphy, [382](#)
 Wireless telegraphy on vessels, [413](#)
 Women as bread-winners, [268](#)
 Women in politics, [267](#)
 Women problems, [267](#)
 Women's Christian Temperance Union, [217](#)
 Women's Higher Normal Sch., [237](#)
 Women's Rescue Homes, [217](#)
 Women workers, [268](#)
 Wood industry, [518](#)
 Wood manufactures, [582](#)
 Wool, [498](#)
 Woolen fabrics, leading cos., [551](#)
 Woolen goods, [551](#)
 Workers, No. of, [254](#)
 Working hours of laborers, [255](#)
 Workpeople, living expense of, [258](#)
 World's war and after, [314](#)
 Wrestling, [340](#)

X

Xavier, Francis, [18](#)

Y

Yamagata, Prince, [21](#)
 Yamashita Kisen Kaisha, [420](#)
 Yap mandate, [27](#), [143](#)
 "Year-names," [17](#)
 Yedo literature, [308](#)
 Yokohama City, [660](#)
 Yokohama Dockyard, [425](#)
 Yokohama Specie Bank, [447](#)
 Yoritomo, [17](#)
 Young Men's Christian Association, [215](#)
 Young men's league, [268](#)
 Young Women's Chr. Ass'n., [216](#)
 "Yushoku" designs, [337](#)

Z

Zen sect, [209](#), [210](#)
 Zinc, [536](#)
 Zokugaku, [338](#)

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